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Supplementary Material for  
**Molecular architecture of the *Saccharomyces cerevisiae* activated spliceosome**

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Movies S1 and S2

## **Materials and Methods**

### **Yeast growth**

The *Saccharomyces cerevisiae* 3.2.AID/CRL2101 strain (*MAT*alpha, *prp2-1*, *ade2*, *his3*, *lys2-801*, *ura3*) carrying the G360D substitution in the helicase domain of Prp2 (53) was kindly provided by Ren-Jang Lin. This mutation renders Prp2 temperature-sensitive at 35 °C. Yeast spliceosomes assembled in the presence of this temperature-sensitive Prp2 mutant stop at the stage of the B<sup>act</sup> complex. Yeast was grown in yeast extract/peptone medium (Formedium™) in a 100 L fermenter to a density of OD<sub>600</sub> 4. Biomass was collected by centrifugation. Cell pellets were washed with cold water and resuspended in a volume of 1 ml per g cells in AGK buffer (20 mM HEPES-KOH pH 7.5 <sup>4</sup>C, 200 mM KCl, 1.5 mM MgCl<sub>2</sub>, 10% v/v glycerol, 0.5 mM DTT, 0.5 mM PMSF) containing protease inhibitors (Roche). Drops of this slurry were frozen in liquid nitrogen.

### **Whole-cell extract preparation**

Frozen beads were ground at 18,000 rpm in a Retsch ZM200 nitrogen mill. The yeast powder was thawed at room temperature and then centrifuged at 4 °C for 30 min in an A27-8x50 rotor (Thermo-Scientific). The supernatant was then centrifuged for 1 hour at 4 °C in a T647.5 rotor (Thermo Scientific) at 42,000 rpm. The clear middle phase in each tube was collected (ca. 60–70% of total volume) and dialyzed three times for 2 hours against 5 L each of buffer D (20 mM HEPES-KOH pH 7.5 <sup>4</sup>C, 50 mM KCl, 0.2 mM EDTA, 20% (v/v) glycerol, 0.5 mM DTT, 0.5 mM PMSF), using SnakeSkin™ dialysis tubing (7000 MW cut-off, Thermo Scientific). After a final centrifugation in an F14-14x50cy rotor (Thermo-Scientific) (10 min at 9500 rpm) aliquots were frozen in liquid

nitrogen and stored at  $-80\text{ }^{\circ}\text{C}$ .

### **Aptamer-tagged pre-mRNA substrate**

For affinity purification of  $\text{B}^{\text{act}}$  complexes, cap-free wild-type actin pre-mRNA tagged with three MS2 RNA aptamers (M3-actin) was prepared by T7 runoff transcription in the presence or absence of  $\alpha$ - $^{32}\text{P}$ -labeled UTP (2). Actin pre-mRNA substrate comprises the end of exon 1, the intron and the 5' end of exon 2 of the yeast actin gene.  $\text{B}^{\text{act}}$  complexes assembled on actin pre-mRNA in the presence of MS2-MBP fusion protein were then purified on amylose affinity columns.

### **Splicing reaction and affinity purification of $\text{B}^{\text{act}}$ complexes**

Splicing reactions were performed in a volume of 36 ml or multiples thereof. Dialyzed prp2-1 extract was thawed in cold water and then incubated at  $35\text{ }^{\circ}\text{C}$  for 30 min to heat-inactivate the Prp2 protein. For a standard 36 ml reaction a mixture of 0.85 pmol  $^{32}\text{P}$ -labeled pre-mRNA and 65 pmol unlabeled actin pre-mRNA (the total pre-mRNA concentration in the reaction was  $\sim 1.8\text{ nM}$ , with a specific activity of  $\sim 160\text{ cpm/fmol}$ ) was pre-incubated with a 15-fold molar excess of MS2-MBP protein in 1.5 ml HEPES-KOH buffer (pH 7.3  $4^{\circ}\text{C}$ ) on ice for 30 min. The splicing reaction mixture contained 60 mM K-phosphate buffer, pH 7.25  $20^{\circ}\text{C}$ , 0.3% (w/v) PEG8000, 2.5 mM  $\text{MgCl}_2$ , 2 mM spermidine, 1.8 nM pre-mRNA, 27 nM MS2-MBP, 2 mM ATP and 14.4 ml dialyzed prp2-1 extract. The reaction was allowed to proceed for 1 hour at  $23\text{ }^{\circ}\text{C}$ . Thereafter the reaction mixture was centrifuged for 10 min at 9000 rpm in a F14-14x50cy rotor (Thermo Scientific) and the supernatant was applied directly to a 0.6 ml column of Amylose Resin<sup>TM</sup> affinity matrix (NEB), equilibrated with G75 buffer (20 mM HEPES-KOH pH

7.3 °C, 1.5 mM MgCl<sub>2</sub>, 75 mM KCl, 0.01% NP-40 (v/v), 5% glycerol (v/v), 0.5 mM DTT and 0.5 mM PMSF). After loading under hydrostatic pressure, the matrix was washed with 10 volumes of G75 buffer. B<sup>act</sup> was eluted from the column with G75 buffer containing 100 mM maltose. HEPES-KOH buffer at pH 7.3 °C had been identified as an optimum buffer for B<sup>act</sup> complex stability in a thermofluor experiment performed according to Chari *et al.* (54).

### **Binding of the dominant negative Prp2 G551N protein to the B<sup>act</sup> ΔPrp2 complex**

Unlike the prp2-1 ts-mutant protein, which does not remain in the B<sup>act</sup> ΔPrp2 complex, the G551N Prp2 mutant protein, although it does not support splicing, nevertheless binds tightly to the B<sup>act</sup> ΔPrp2 complex (55). For locating Prp2 within the B<sup>act</sup> ΔPrp2 complex, recombinant dominant-negative G551N Prp2 protein (kindly provided by Jana Schmitzová) was added to the sample after elution from the amylose column. Purified B<sup>act</sup> ΔPrp2 complexes were incubated with 2-fold molar excess of the G551N Prp2 mutant protein. The same molar amount of recombinant wild-type Spp2 was added. After incubation the B<sup>act+Prp2</sup> complex was loaded directly onto a glycerol gradient.

### **Glycerol-gradient sedimentation of the B<sup>act</sup> complex**

The B<sup>act</sup> peak from the amylose column was loaded onto a glycerol gradient [10–30% glycerol (v/v) in G75 buffer containing 0.5 mM each of DTT and PMSF]. Native gradients were run using 4.4 ml polyallomer tubes in a TH660 rotor at 4° C for 17 hours at 21,000 rpm. When particles were centrifuged under cross-linking conditions, DTT and PMSF were omitted from the gradient, the 30% solution was supplemented with 0.1% EM-grade glutaraldehyde (EMS) and the 10% solution was supplemented with 1 mM



PMPI (Thermo Scientific). After centrifugation, gradients were harvested from bottom to top in 24 fractions of about 180  $\mu$ l. Crosslinked fractions were immediately quenched with 50 mM each of aspartate and cysteine, pH 7. Before electron cryomicroscopy samples were subjected to a buffer exchange against G75 buffer containing 2 mM IPTG and 0.5 mM DTT, but without glycerol and NP-40.

### **Crosslinking of B<sup>act</sup> complexes and crosslink identification by mass spectrometry**

Approximately 10–20 pmol of purified B<sup>act</sup> complexes were cross-linked with 150  $\mu$ M BS3 for 30 min at 25 °C, pelleted by ultracentrifugation and analyzed essentially as described before (56), with the following modifications: precipitated material was dissolved in 4 M urea / 50 mM ammonium bicarbonate, reduced with DTT, alkylated with iodoacetamide, diluted to 1 M urea and digested with trypsin (1:20 w/w). Peptides were reverse-phase extracted and fractionated by gel filtration on a Superdex Peptide PC3.2/30 column (GE HealthCare). 50  $\mu$ l fractions corresponding to an elution volume of 1.2–1.8 ml were analyzed on a Thermo Scientific Orbitrap Fusion Tribrid and on Sciex TripleTOF 5600+ (dataset 1), Thermo Scientific Q Exactive (dataset 2) or Q Exactive HF (dataset 3) mass spectrometers. Protein-protein crosslinks were identified by pLink1.22 or 1.23 search engine and filtered at FDR 1% ([pfind.ict.ac.cn/software/pLink](http://pfind.ict.ac.cn/software/pLink)) according to the recommendations of the developers (57). For simplicity, the crosslink score is represented as a negative value of the common logarithm of the original pLink score, that is  $\text{Score} = -\log_{10}(\text{“pLink Score”})$ . The crosslinks observed with at least 2 spectral counts are listed in Table S2. For model building, a maximum distance of 3 nm between the C $\alpha$ -atoms of the crosslinked lysines was allowed. The actual distribution of C $\alpha$ -C $\alpha$  distances

between crosslinked residues that can be mapped in the model of the B<sup>act</sup> complex is shown in Fig. S19.

### **EM and image processing**

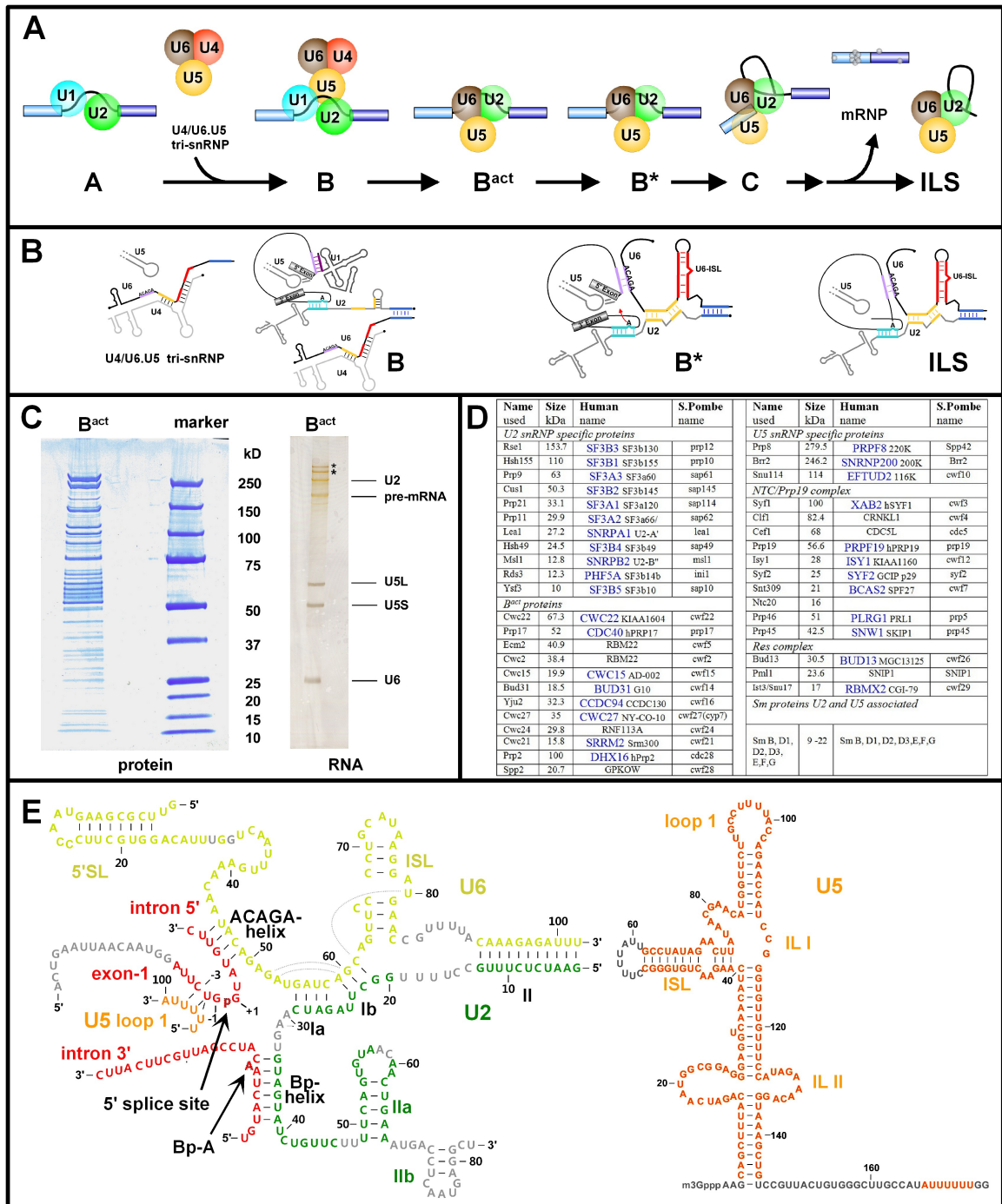
Purified spliceosomes were allowed to adsorb on a thin carbon film prior to rapid plunge freezing into liquid ethane at 100% humidity and 4 °C. Images were recorded at -193 °C in a Titan Krios electron microscope (FEI Company, The Netherlands) on a Falcon II direct electron detector at 74,000x magnification resulting in a pixel size of 2 Å on the specimen level. We extracted ~1 million particle images from the micrographs and applied several sorting steps at the 2D and 3D level. The first sorting was based on CTF parameters by applying multivariate statistical analysis and classification to power spectra as implemented in Imagic-5 (58). Only particles in classes revealing isotropic Thon rings were used for the subsequent rounds of sorting. 2D multivariate statistics and classification was then applied to the non-aligned particle images and subsequently to the aligned particles. In each round, particles contributing to bad classes were excluded from further processing. The remaining ~650,000 particles were then CTF corrected by CTFFIND (59) and applied to 3D classification in RELION (60). For the high-resolution structure determination, the ~122,000 particles contributing to the best 3D class were used for refinement revealing an 8 Å resolution structure. Roughly 30% of the spliceosome density were not clearly defined at this level of resolution. As these densities largely disappear during the higher-resolution structure calculations, we excluded them with a mask in the final rounds of the refinement. A soft mask with a cut-off of 6 voxel was used for the refinement and for the determination of resolution. We obtained 5.8 Å resolution for the final map by using the Fourier-shell-correlation function calculated

from two independent data sets and a threshold of 0.143. The molecular components which were masked away are indicated in Figures S12, S13 and S17. A local resolution plot revealed that there are indeed areas of high resolution in the catalytic RNP core of the B<sup>act</sup> complex that approach the maximum achievable resolution limit corresponding to the Nyquist frequency (4 Å). Some peripheral regions have somewhat lower resolution.

### **Model fitting and building**

Available X-ray or homology models of proteins were initially fit into the EM density by CHIMERA (61). Individual models of substructures (e.g. domains or structural motifs) were further fitted as rigid bodies by COOT (62). After visual inspection, the models were adjusted manually in the density, the disordered regions were removed and regions that were reorganized or were not present in the initial models (e.g. loops and various elements of secondary structure) were built in COOT. The detailed processing of protein models incorporated into the B<sup>act</sup> structure is described in Table S1. Initially, the U5 snRNA model of the *S. cerevisiae* tri-snRNP (13), the U2/U6 snRNA catalytic core and the branch-point helix of the *S. pombe* ILS spliceosome (10), as well as a 5' group II intron fragment (5'-GUUAU/gu-3')(23) were fitted into the 10 Å cryo-EM density by visual inspection in CHIMERA. All further adjustments were done manually by using the COOT program with the 5.8 Å cryo-EM map. The 5' stem-loop of U6 and the U2/U6 helix II were generated by rigid-body fitting of idealized double-stranded RNA helices. Sections of the RNA models that could not be placed unambiguously into a density, or that did not have an associated density because of their high flexibility, are shown in grey in Fig S1 (RNA–RNA interactions). The atomic model was refined by the real space

refinement routines as implemented in PHENIX, using base pairing restraints (63). The RNA model was then validated by the MolProbity server (64). A summary of the Molprobity scores is shown in Table S3. The Molprobity scores for all individual RNA nucleotides from the final model are provided in a separate HTML file. Final visualization was carried out with CHIMERA and PyMOL (<http://www.pymol.org>).



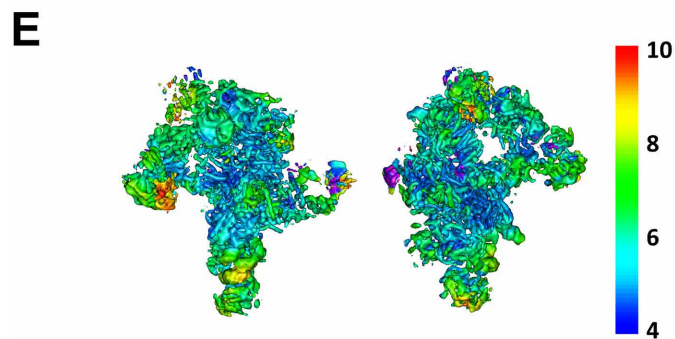
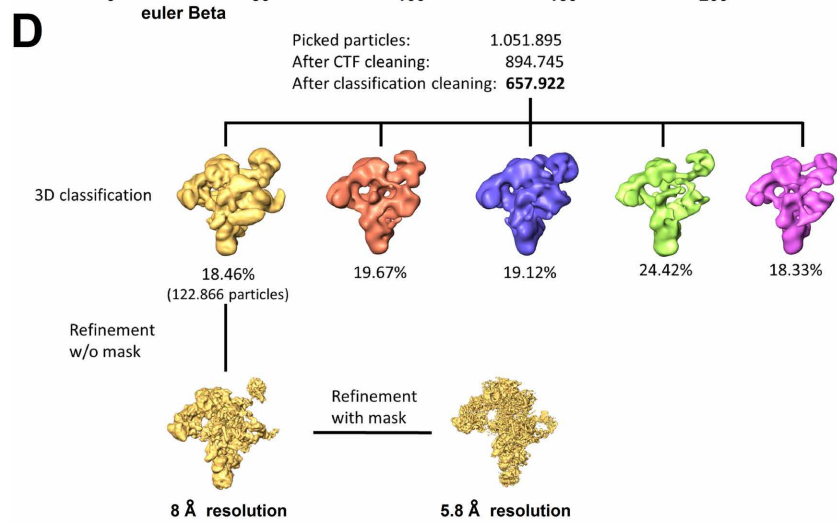
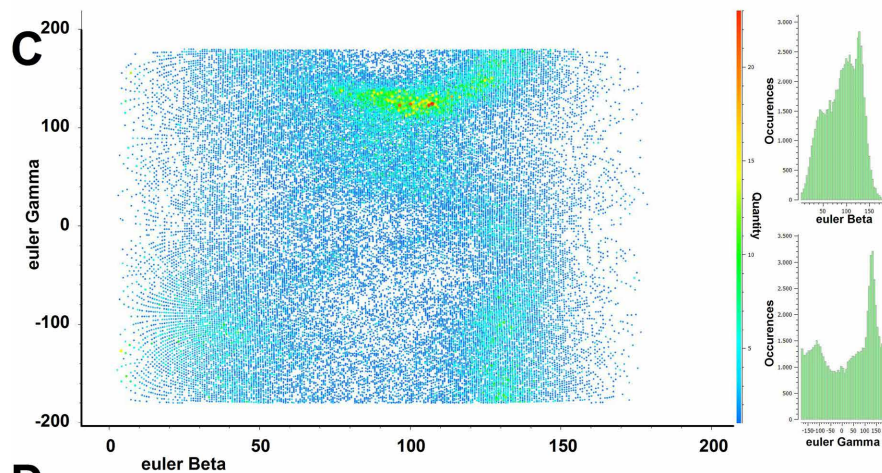
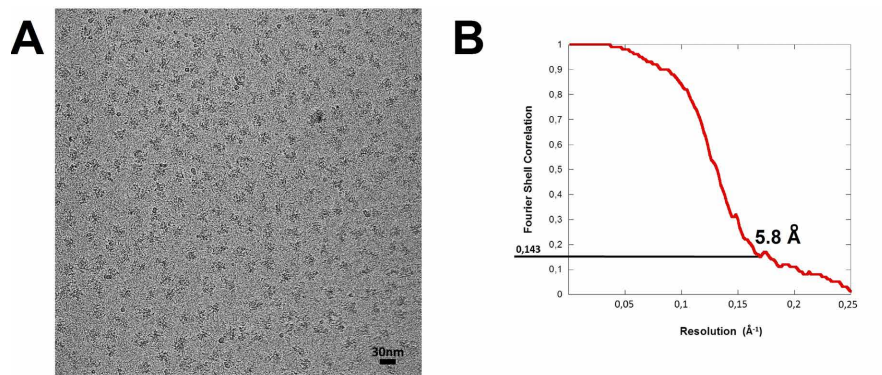
**Fig. S1**

**Purification and characterization of B<sup>act</sup> spliceosomes from the yeast *Saccharomyces***

*cerevisiae*. (A) Assembly and remodeling steps of the spliceosome during activation and

catalysis of splicing. (B) RNA–RNA rearrangements occurring during spliceosome

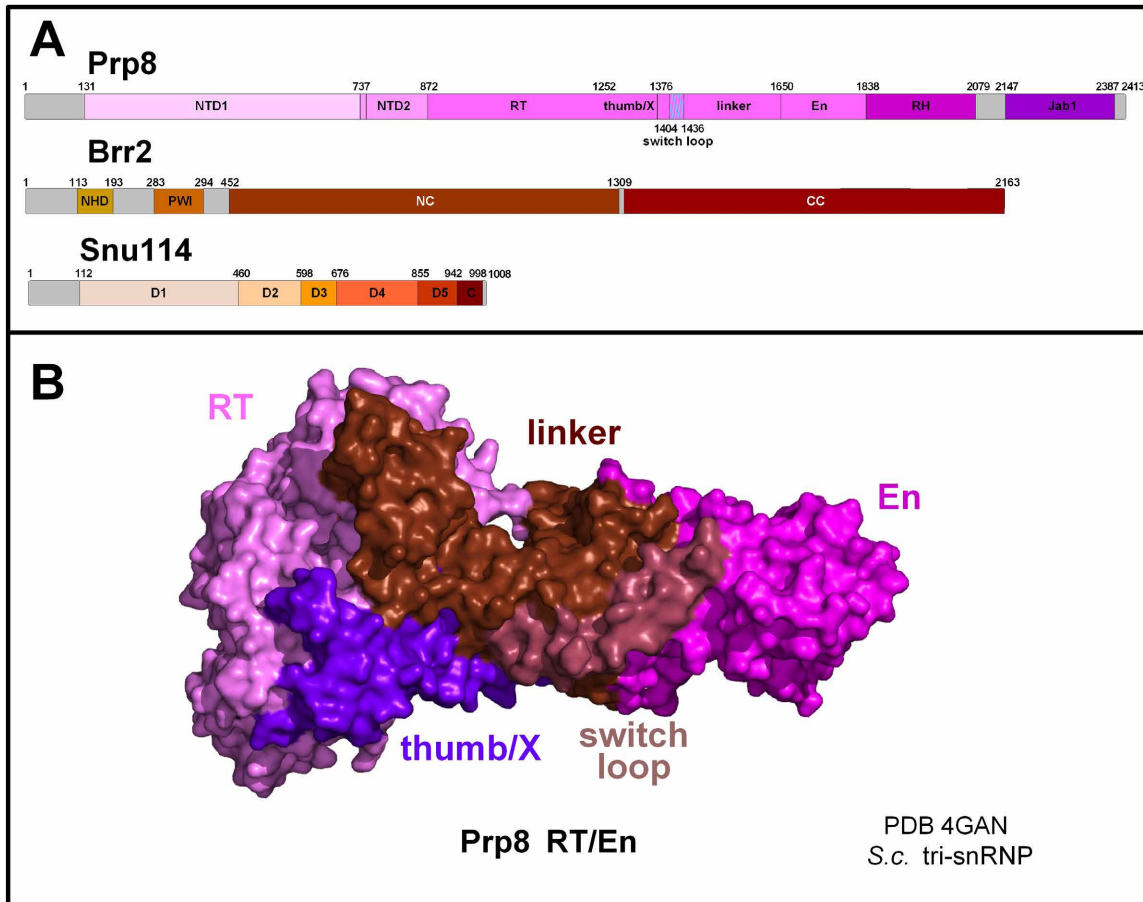
activation and the catalysis of splicing. (C) Proteins and RNA isolated from purified B<sup>act</sup> complexes were visualized on an SDS-polyacrylamide gel by Coomassie blue staining (left) or by silver staining (right). (D) Proteins present in yeast B<sup>act</sup> complexes and their molecular masses. Proteins were identified by mass spectrometry (17). Standard names for human proteins are shown in blue. (E) Schematic representation of the secondary structure of RNA in the B<sup>act</sup> spliceosome. The complete secondary structure of the U5 snRNA is shown on the right. Only selected regions of the pre-mRNA and U2 snRNA are shown. Regions of the RNA that could not be placed unambiguously into the EM density or that did not have an associated density owing to their high flexibility are shown in grey. Tertiary interactions are indicated by stippled lines.



## Fig. S2

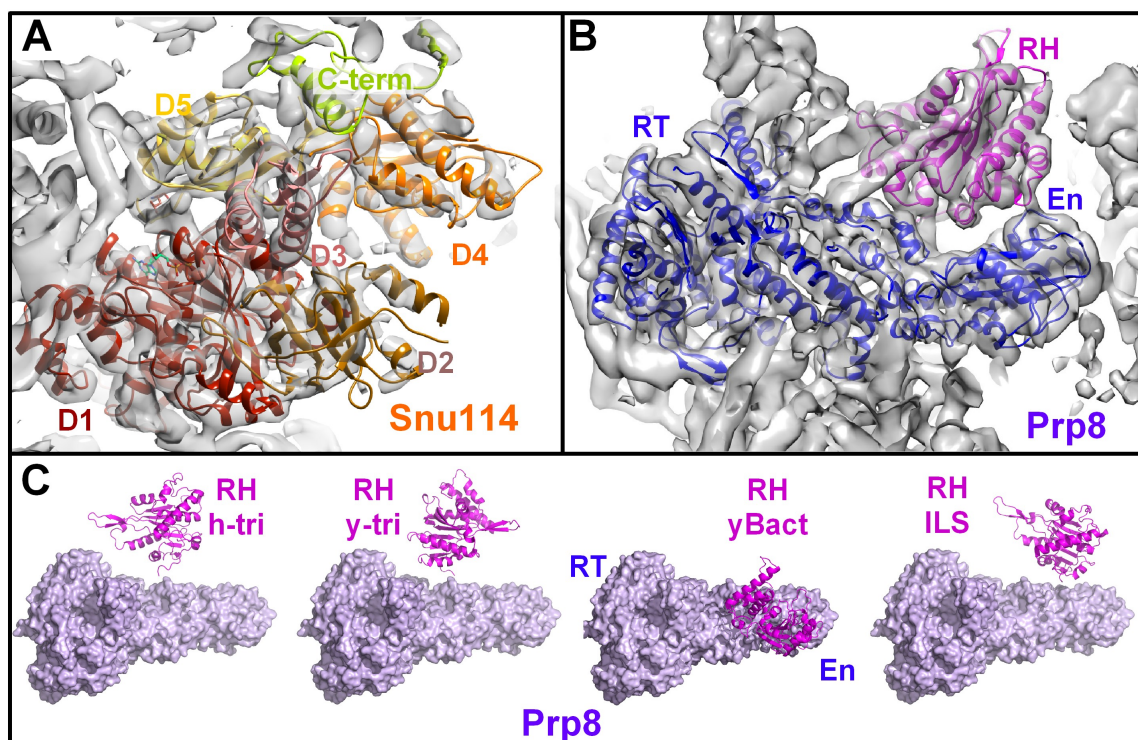
**Cryo-EM and image-processing of the yeast B<sup>act</sup> complex.** (A) Typical cryo-EM raw image of *S. cerevisiae* B<sup>act</sup> spliceosomes recorded with a Titan Krios (FEI Company) electron microscope at a nominal magnification of 74,000x with a Falcon II direct electron detector resulting in a pixel size of 2 Å/pixel. (B) Fourier-shell correlation function of two independently refined half data sets indicates a global resolution of 5.8Å for the masked B<sup>act</sup> spliceosome comprising ca. 70% of the density of the whole spliceosome. (C) Euler angle distribution of all particle images that contributed to the final 3D map. The coordinates describe the beta and gamma angles. Size and color of the plotted dots indicate the number of particles at any given Euler angle. Although one angular orientation of B<sup>act</sup> dominated, an almost complete angular coverage was obtained. (D) Computational sorting scheme. Roughly 1 million particle images were selected from the micrographs. In a first sorting step ~10% of particle images were discarded based on the quality of Thon rings in local power spectra. Another 15% particles were excluded according to multiple rounds of 2D classifications. The remaining 657,922 particles were separated into 5 classes by 3D classification in RELION (60). Images contributing to the best defined spliceosome structure (~18.5%) were then refined to a structure at 8 Å resolution without masking. The final structure at 5.8 Å resolution was obtained by applying a soft mask during the final steps of the refinement process. (E) Local resolution plot reveals a resolution distribution from about 4-10 Å with some less well defined parts at the periphery of the complex. Higher resolution regions (in blue, close to 4 Å resolution) were obtained for the centrally-located catalytic core of the spliceosome.





**Fig. S3**

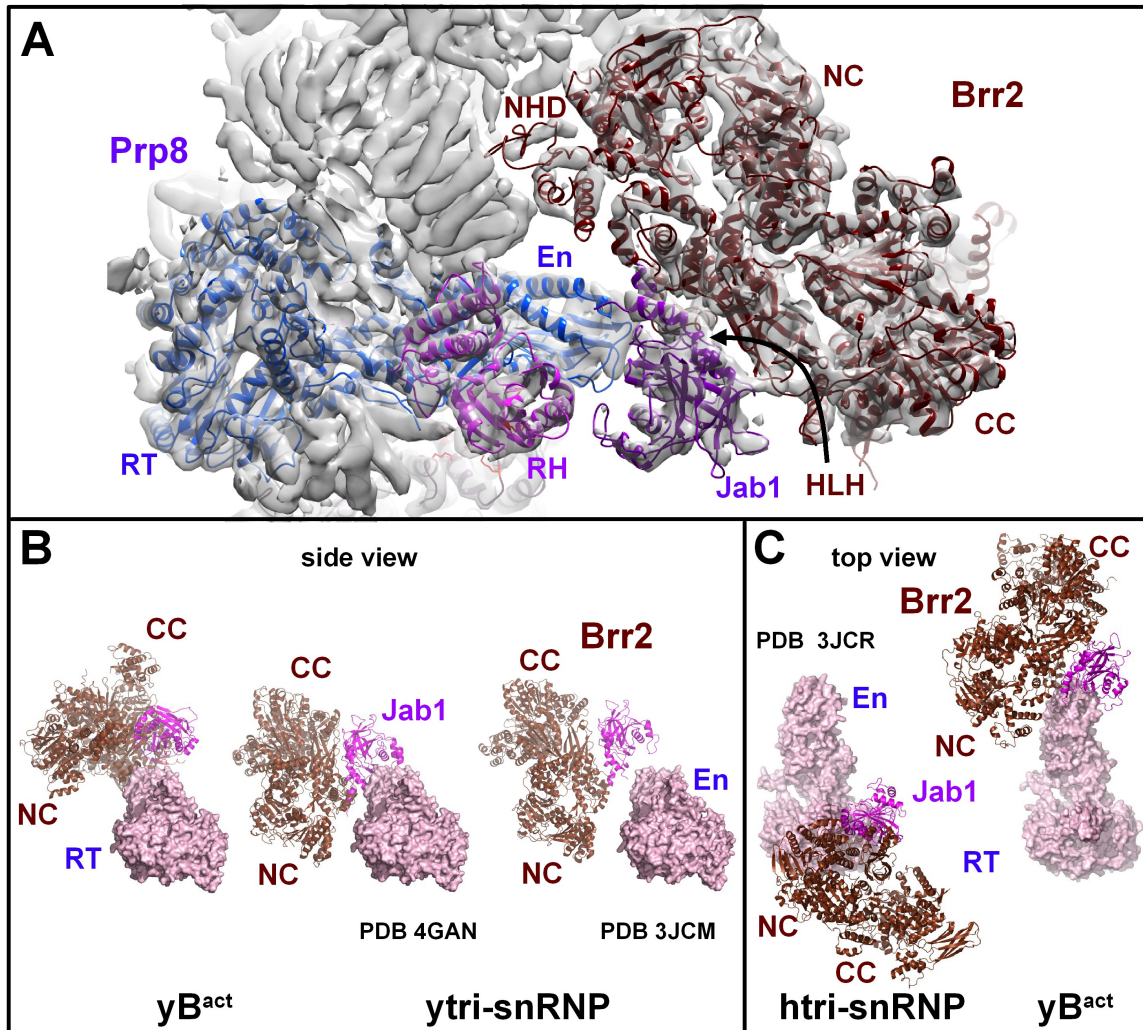
**Structural organization of Prp8, Brr2 and Snu114.** (A) Organization of Prp8, Brr2 and Snu114 domains. Prp8, NTD1 and NTD2, N-terminal domains 1 and 2; RT, reverse-transcriptase-like; thumb/X, linker; En, endonuclease-like; RH, RNase H-like; Jab1, Jab1/MPN-like. Brr2, NHD, N-terminal helical domain; PWI, N-terminal, non-canonical PWI domain; NC/CC N-terminal/C-terminal helicase cassette. Snu114, D1–D5 homologous to EF-G/EF-2. (B) Three-dimensional organization of the Prp8 RT, thumb/X, linker and En domains in the *S. cerevisiae* tri-snRNP, according to (11). The location of the switch loop is also indicated.



**Fig. S4**

**Structure and location of Snu114 and Prp8 in the yeast  $B^{act}$  complex.** (A) Density fit of Snu114 domains D1–D5. (B) Density fit of Prp8: RT, reverse-transcriptase-like; En, endonuclease-like; RH, RNase H-like domains; (C) Variation in the position of Prp8's RH domain (magenta ribbon model) relative to the Prp8 En domain in human (h) and yeast (y) tri-snRNPs, and in the *S. cerevisiae*  $B^{act}$  complex and *S. pombe* intron-lariat spliceosome (ILS). The structure of the Prp8 (from *S. cerevisiae*  $B^{act}$ ) RT, thumb/X linker and En domains are shown as a space filling model in grey. In  $B^{act}$  the RH domain is closely associated with the “back side” of the En domain, whereby the RH RNA-binding  $\beta$  sheet faces the En domain. The palm edge of the RH domain interacts with the En domain of Prp8 in a region where in the ILS (and tri-snRNPs) the tip of a major  $\beta$ -hairpin-loop (switch loop) is instead located (see also Fig. 2 and text). The density for the

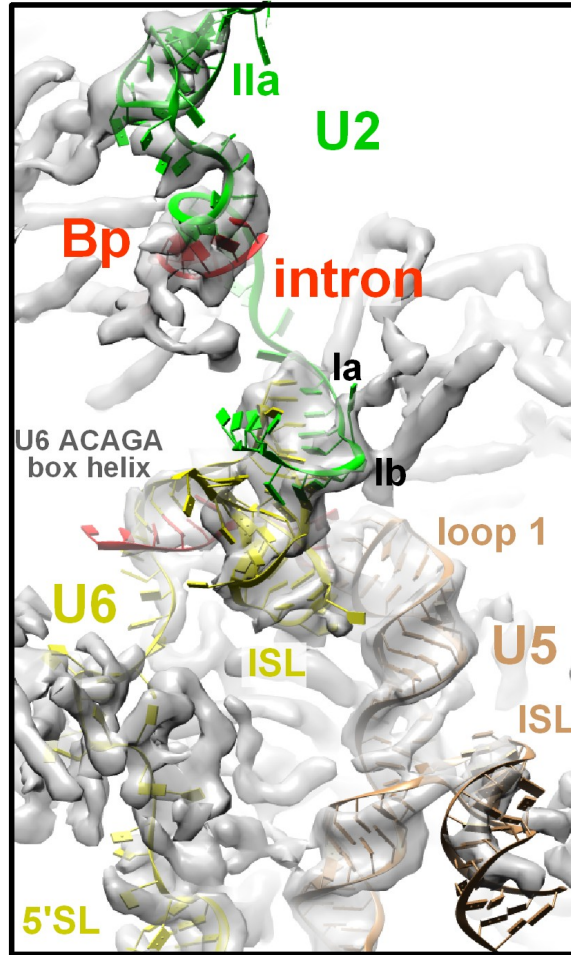
$\beta$ -hairpin-loop of the RH domain is not well defined in the B<sup>act</sup> structure, consistent with the possibility that it adopts a more open conformation.



**Fig. S5**

**Structure and location of the RNA helicase Brr2 and Prp8 Jab1 domain. (A)**

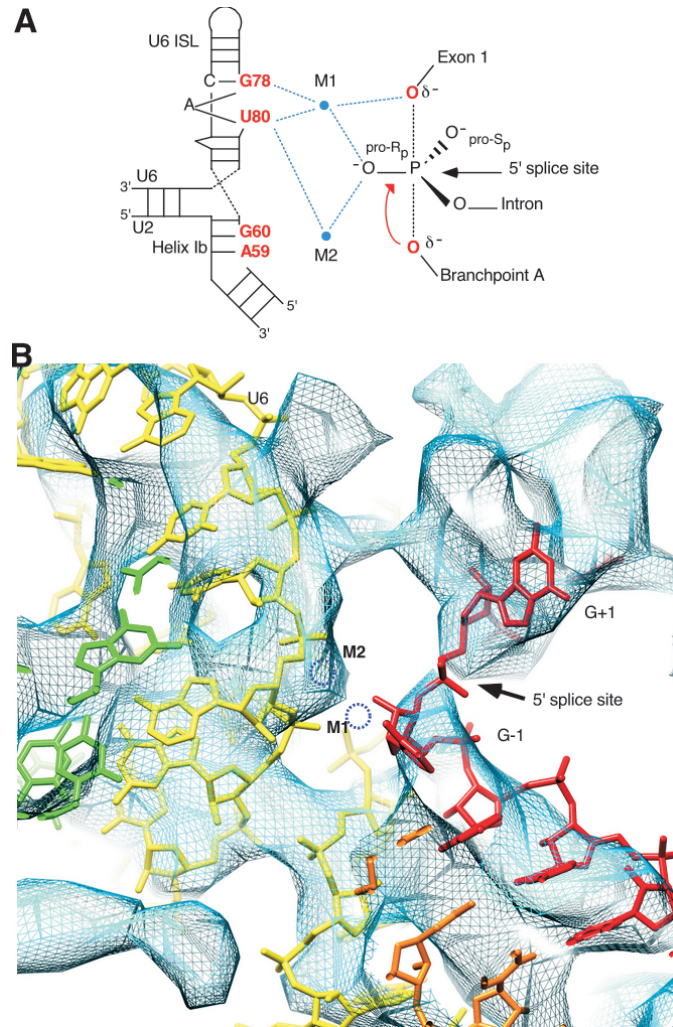
Expanded view of the shallow slope of  $B^{act}$  (Fig. 1A) showing the fit of Brr2's helicase region in complex with Prp8's Jab1 domain. The tip of Prp8's En domain interacts with Brr2 through the HLH domain of the NC cassette. **(B)** Brr2 is located at the same end of Prp8's RT/En domain in  $B^{act}$  and the yeast tri-snRNP (13-15); however, in the two models Brr2 has a different orientation (side views). **(C)** Top view illustrating that Brr2 is located at radically different positions in the human tri-snRNP (16) and yeast  $B^{act}$  complex. It is found at opposite ends of Prp8's RT/En domain in the two models.



**Fig. S6**

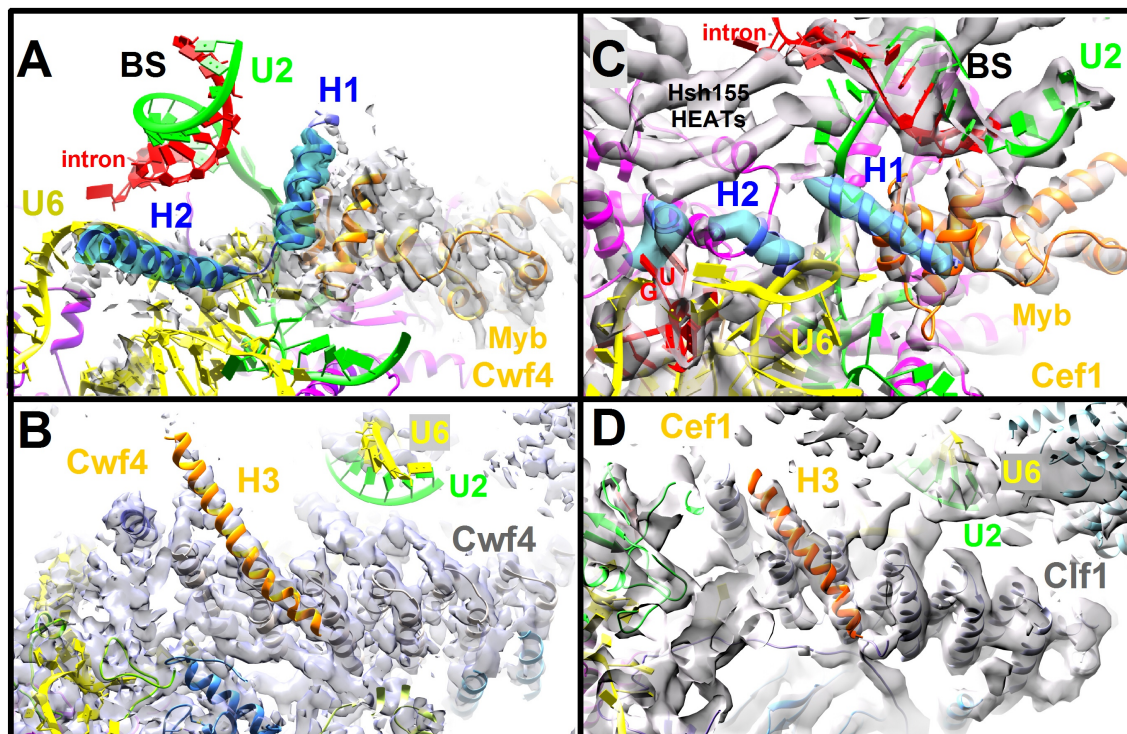
**A close-up view of the central RNA network in the B<sup>act</sup> spliceosome.** Shown is a slice through the spliceosome showing only the high density elements of the cryo-EM map, comprising U5 RNA, U2/U6 catalytic RNA network, the BS/U2 RNA helix, the U6 ACAGA box helix, the U2 RNA helix IIa and corresponding linker regions.





**Fig. S7**

**Putative location of the two catalytic metal ions in the  $B^{\text{act}}$  complex.** (A) Constellation of the catalytic metals for step one of pre-mRNA splicing. The diagram is adapted from (24). The scissile phosphate of the pre-mRNA is shown as a pentacovalent transition state and the blue dashed lines depict the coordinations of oxygens directly involved in the reaction (red). M2 is further coordinated by A59 and G60. (B) Model of the catalytic RNA-RNA network in the experimental EM map, where U2 snRNA is shown in green, U6 snRNA in yellow, and the pre-mRNA in red. The putative position of the catalytic metal ions are shown as stippled blue circles (see also text).

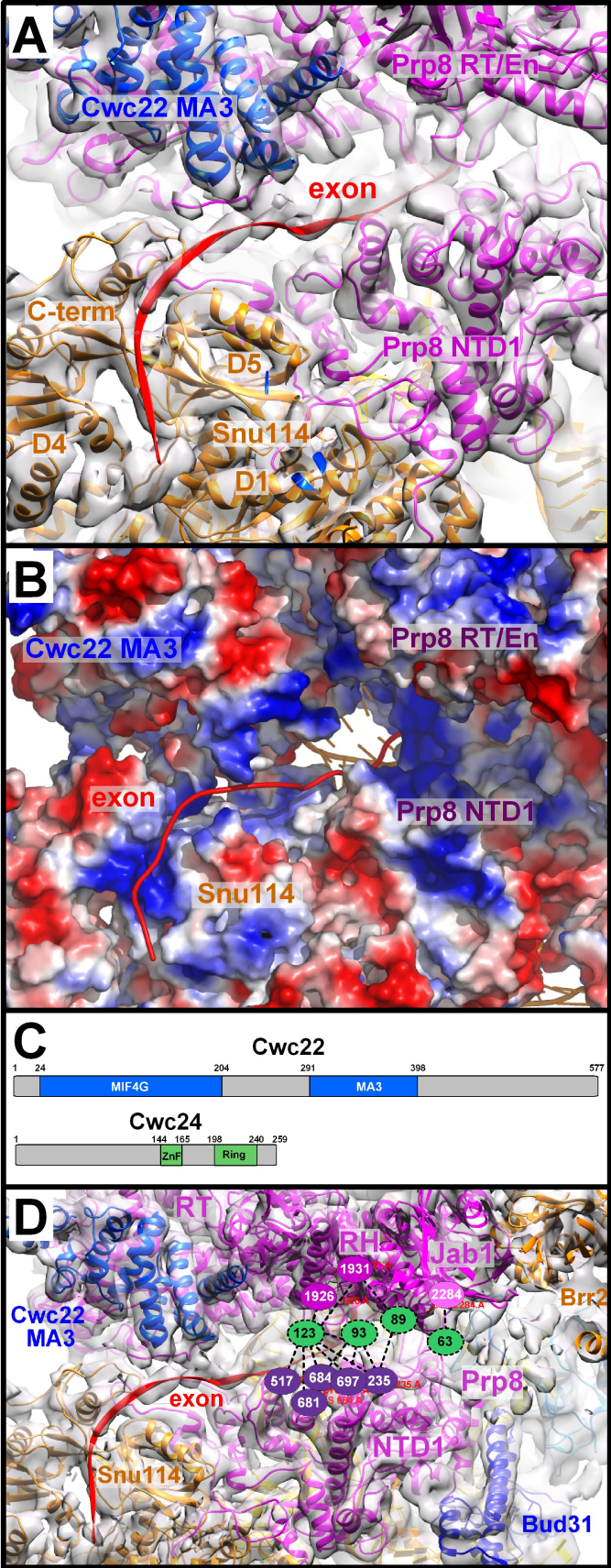


**Fig. S8**

**Differential organization of the N-terminal region of Cef1 (Cdc5) in  $B^{\text{act}}$  and ILS complexes.** Slices through the *S. pombe* ILS structure showing density elements of the Cryo-EM map (10), comprising the N-terminal region of the *S. pombe* Cdc5 protein (*S. cerevisiae* Cef1) including its Myb domains and the more C-terminally located  $\alpha$ -helices H1 and H2 (A) and H3 (B). (C, D) Slices through the *S. cerevisiae*  $B^{\text{act}}$  structure showing density elements of the Cryo-EM map comprising the Cef1 Myb domains and the potentially rearranged  $\alpha$ -helical elements corresponding to the Cdc5 helices H1 and H2, respectively, and, (D), the Cef1  $\alpha$ -helix H3 (corresponding to the *S. pombe* H3  $\alpha$ -helix). For better orientation, the positions of certain U2 and U6 RNA elements in the ILS and  $B^{\text{act}}$  structures are also indicated in panels A to D. In the *S. cerevisiae*  $B^{\text{act}}$  complex, the Cef1 Myb domains and  $\alpha$ -helix H3 have nearly the same structure and position as in the ILS (see corresponding densities with orange helices shown in panels A, B and C, D,

respectively), consistent with protein crosslinks (Table S1). Densities for the *S. pombe* H1 and H2  $\alpha$ -helices are clearly missing at corresponding positions in B<sup>act</sup> (compare blue densities in panels A and C, respectively). One possibility is that both Cdc5  $\alpha$ -helices H1 and H2 are restructured in B<sup>act</sup> such that H1 is rotated by 110° and H2 corresponds to the kinked  $\alpha$ -helical element in B<sup>act</sup>, with its C-terminal part being situated in the density element close to the 5'ss, while the N-terminal part of the kinked helix remains close to the U6 snRNA turn. As an alternative explanation, the regions of Cef1 corresponding to the Cdc5  $\alpha$ -helices H1 and H2 are flexible in the B<sup>act</sup> structure (and therefore not visible in our EM map) and the density elements close to the 5'ss and the U6 turn, as well as the density element associated with the Myb domains in the B<sup>act</sup> structure may therefore comprise parts of one or more other proteins. Even if this were true, it does not, however, invalidate our major conclusion that the 5'ss is shielded via its close interaction with a protein element that hinders access of the BS adenosine to the 5'ss. Moreover, our data indicate that the N-terminal region of Cef1(Cdc5) restructures from the B<sup>act</sup> to ILS transition.

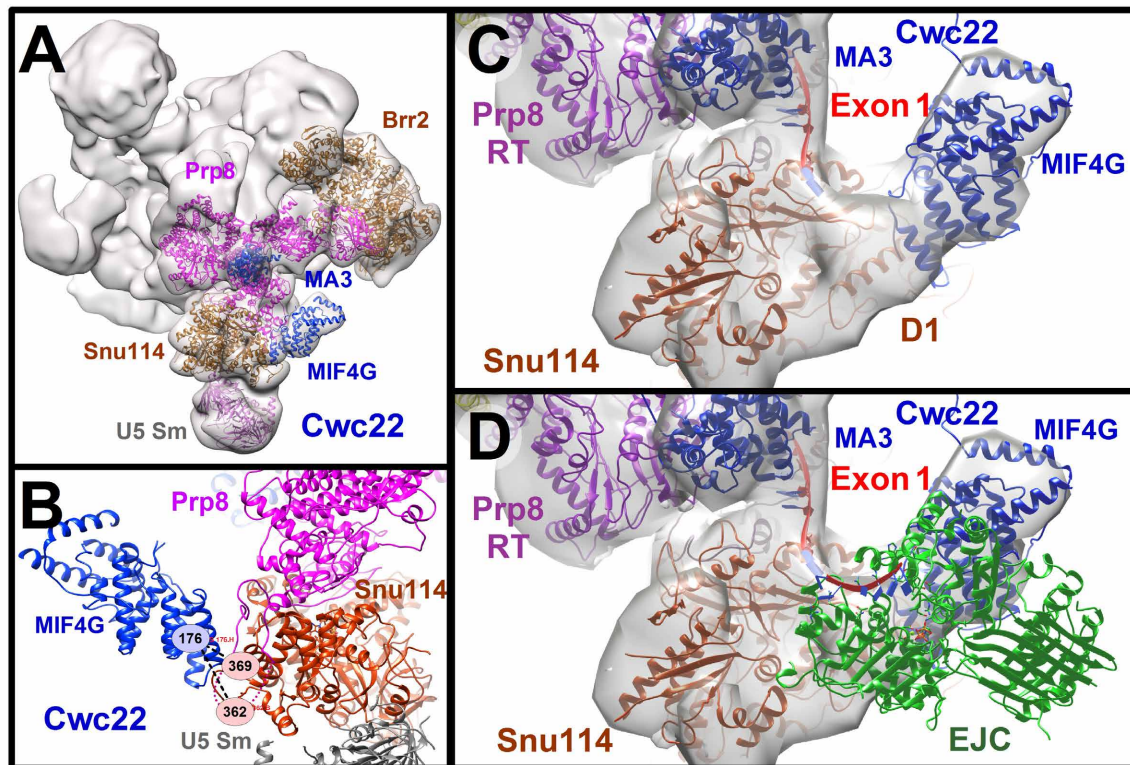




**Fig. S9**

**Crosslinking of Cwc24 to Prp8 domains close to the 5' exon binding channel. (A)**

Path of the 5' exon binding channel in B<sup>act</sup> (as in Fig. 4A). **(B)** Electrostatic surface potential of the 5' exon binding channel. The RNA follows the basic patches (blue), whereas acidic patches (red) are avoided. **(C)** Domain structure of Cwc22 and Cwc24. **(D)** Crosslinks of Cwc24 to Prp8's NTD1, RH and Jab1 domains. The crosslinks indicate that the N-terminal region of Cwc24 is located centrally in the cleft between Prp8's RH and NTD1 domains, close to the 5' exon binding channel. Numbers indicate the positions of crosslinked lysine residues (connected by stippled lines) in each protein. Numbers in ovals without borders are residues in the modeled part of the protein, whereas those in ovals with stippled borders are residues within non modeled regions. The latter are arbitrarily placed close (less than 30 Å) to their crosslinking partners observed in our model.

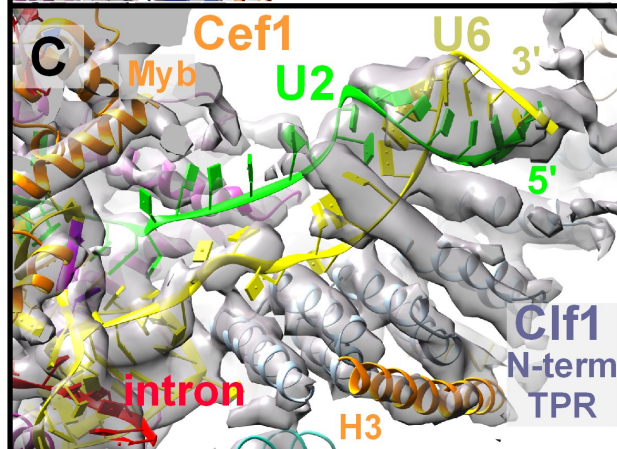
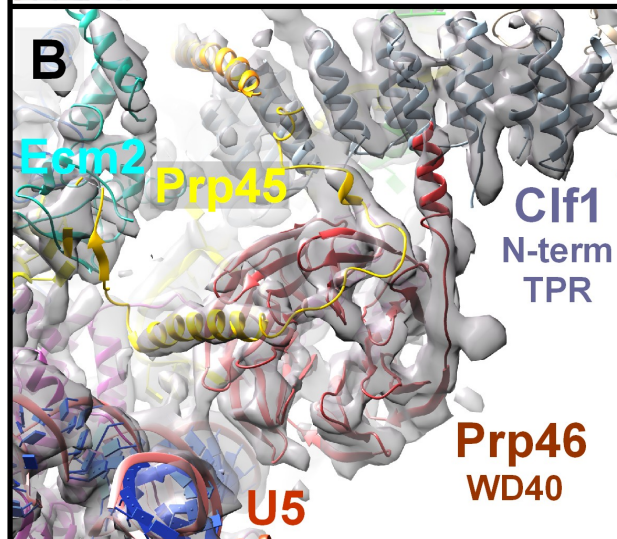
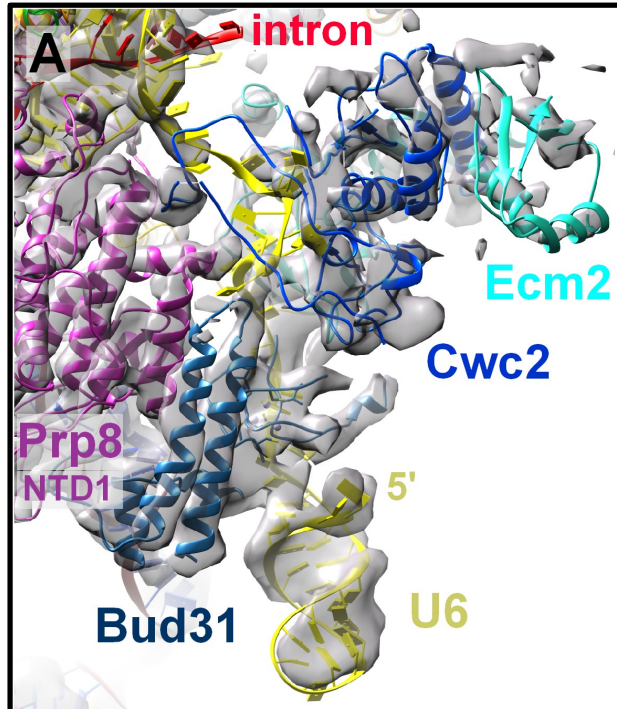


**Fig. S10**

**Position of the Cwc22-MIF4G domain and possible location of the exon junction complex in subsequently formed spliceosomes.** (A) Back view of the low resolution  $B^{\text{act}}$  model with the placement of U5 proteins and Cwc22's MA3 and MIF4G domains. (B) Crosslinks between the Cwc22's MIF4G domain and Snu114. Lysine residues 362 and 369 are located in the region of Snu114's D1 domain, which is encircled by the lasso-like protrusion of Prp8's NTD1 domain (10). (C) Close-up view of the fit of Cwc22's MIF4G domain into the density element close to Snu114's D1 domain, as observed in the low resolution  $B^{\text{act}}$  model. (D) Putative location of the EJC in the spliceosome. The crystal structure used to place Cwc22 contains an EIF4G molecule with its two RecA domains (PDB 4c9b; see Table S2). To determine the putative location of an EJC in the spliceosome, the RecA2 domain of EIF4G from that structure was

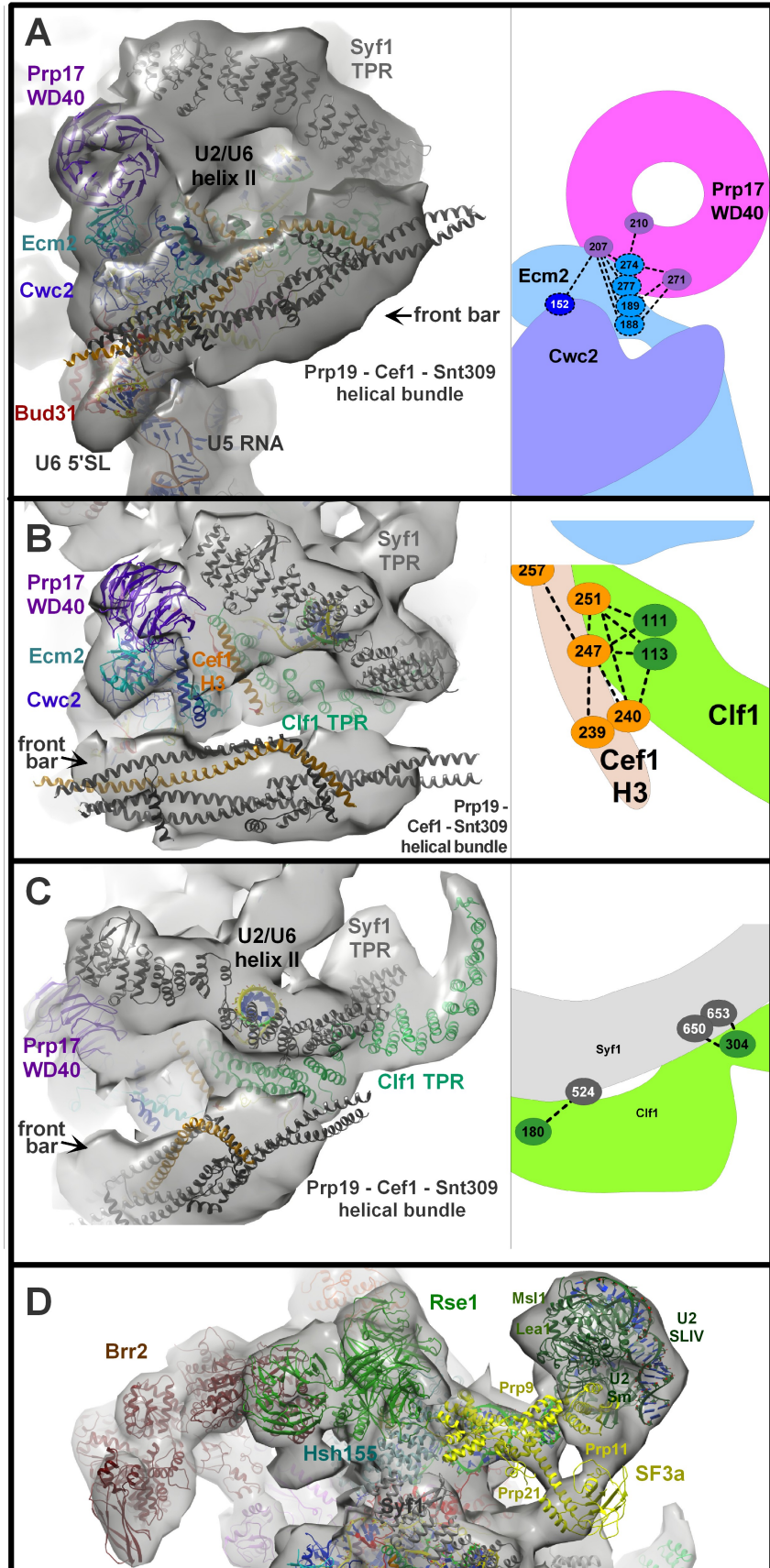
superimposed with the RecA2 domain of the EIF4G contained in the EJC structure (PDB codes 2joq and 2jos). The small piece of RNA contained in the EJC structure (red arrow) would be close to the exon channel and has the correct polarity. We note that this is a model for the location of the EJC in spliceosomes from those organisms having an EJC, and that yeast *S. cerevisiae* does not belong to this group. In addition, the EJC is stably recruited to the spliceosome after the first step of splicing as shown for the human spliceosome (65).





**Fig. S11**

**Structure and location of the 5'- and 3'-terminal parts of U6 snRNA and the proteins with which they interact.** (A) Fit of Cwc2, Ecm2 and Bud31 in the EM density map. All three proteins are in close contact with the 5'-terminal stem-loop (SL) of U6 snRNA. (B) The N-terminal TPR repeats of Clf1 and the WD40 domain of Prp46 fit into a pocket formed by the ISL loop of U6 snRNA and stem I of the U5 snRNA in B<sup>act</sup> as also found in the *S. pombe* ILS. (C) Cef1 (Cdc5)  $\alpha$ -helix 3 (H3) is located next to the N-terminal TPRs of Clf1 in an almost identical position as in the *S. pombe* ILS, consistent protein crosslinking (Table S2 and Fig. S12B).

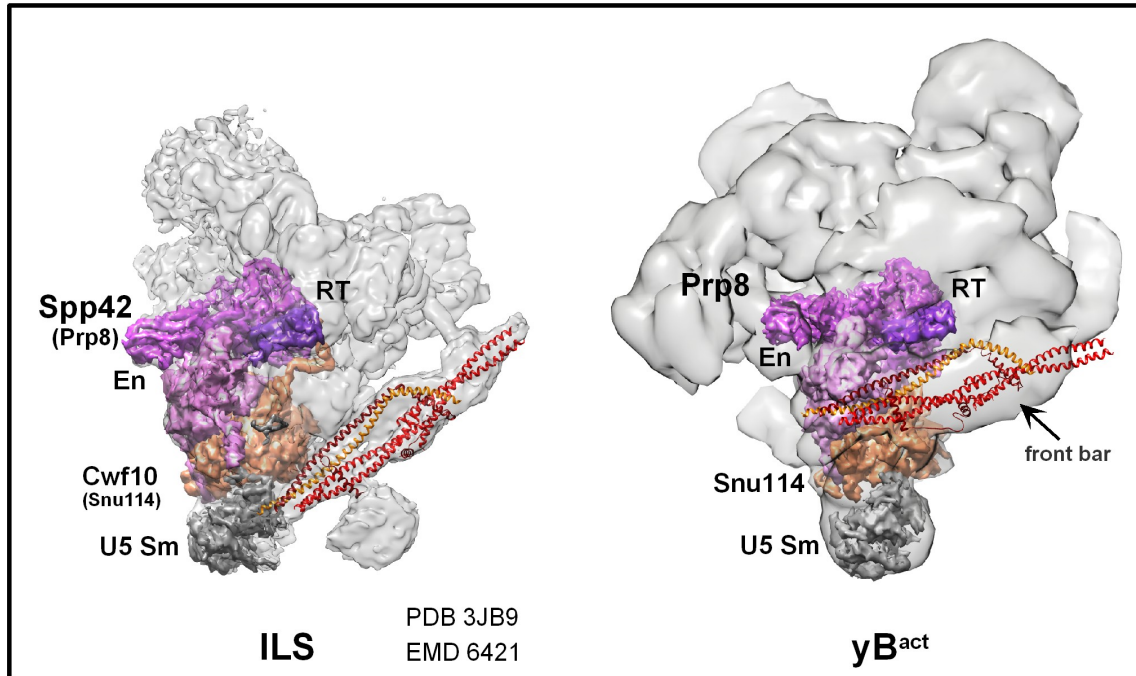


**Fig. S12****Location and crosslinks of Prp17-WD40 domain, NTC proteins and U2 components**

**in the B<sup>act</sup> complex.** (A) Front view of the low resolution B<sup>act</sup> model and location of the Prp17-WD40 domain above Ecm2. In the 3D reconstruction of the B<sup>act</sup> complex generated without masking, the course of the N-terminal TPR repeats of Syf1, connected with structural elements of Cwc2 and Prp17-WD40, can be identified clearly. Right: intermolecular crosslinks between the Prp17-WD40 domain and Ecm2 and Cwc2. The numbers indicate the positions of crosslinked lysine residues in the three proteins. (B) Top view of the low resolution B<sup>act</sup> model and location of the Clf1 TPR repeats and Cef1 (Cdc5) helix3 (H3) (see Table S1). A density element lying perpendicular to the central part of the main body in the front view is sized suitably to accommodate the helical-bundle domain with the Prp19 core (Prp19-Cef1-Snt309 bar). Right: intermolecular crosslinks between the Clf1 TPRs and Cef1 H3. (C) Front view of the B<sup>act</sup> complex showing the long, curved TPR repeats of Syf1 and Clf1, which cross one another and together form a basket-like structural element as shown in the upper part of the *S. pombe* ILS (10). Much of the mass of the *S. pombe* proteins can be fit as rigid bodies into the corresponding density regions in the B<sup>act</sup> spliceosome. Some local adaptations were necessary, but the curvature of the repeats and also the cross-over points are organised in a similar way in the B<sup>act</sup> complex and the *S. pombe* ILS. As the density of the TPR repeats of Clf1 and Syf1 in the 5.8 Å B<sup>act</sup> structure breaks off abruptly, this only becomes clear when one also takes into account the non-masked spliceosome model and intermolecular crosslinks that are found between Clf1 and the Syf1 TPRs, as shown on the right. (D) Top view of the low resolution B<sup>act</sup> model and density elements in B<sup>act</sup> attributed to the U2 Sm core RNP and part of the SF3a protein complex. Within the



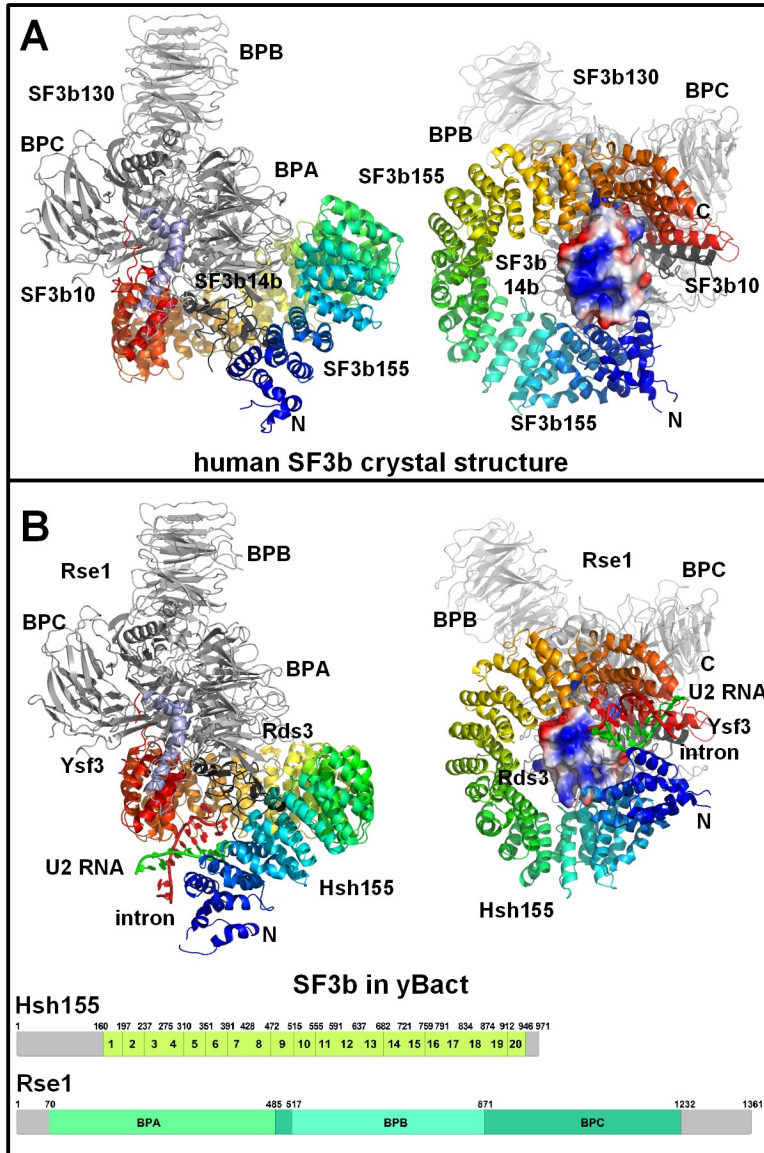
density region that was identified at high resolution by masking, the last reliably fit element is stem-loop IIa of the U2 snRNA. In B<sup>act</sup>, this element is connected to a very large density region that is structurally less stable and was masked out to obtain the high resolution structure. The non-masked 3D reconstruction shows that this region has a very large globular structure, bridged to the U2-SF3b complex and the NTC region containing Syf1 and Clf1. Its position with respect to the U2 stem-loop IIa and the SF3b proteins – and also its very large size – indicate that it contains the large 3'-terminal components of U2 snRNP: the U2 Sm ring with the proteins Lea1 und Msl1 associated with stem-loop IV (SLIV). A main connection is likely provided between the 3' terminal U2 snRNP domain and the top domain of B<sup>act</sup> through the SF3a protein complex. The low resolution in this region prevents exact localization, despite the availability of the crystal structure of the SF3a core complex (66).



**Fig. S13**

**Prp19's helical bundle is differentially orientated in B<sup>act</sup> versus the ILS.** EM density maps of the *S. pombe* ILS (EMD 6421) and *S. cerevisiae* B<sup>act</sup> complexes (front view of the low resolution B<sup>act</sup> model) with the U5 snRNP proteins Prp8 (purple), Snu114 (orange) and Sm core (grey) indicated. The positions of the U5 snRNP proteins and their structural organisation share many similarities in both spliceosomal complexes. In the *S. pombe* spliceosome the coiled-coil elements of the four copies of Prp19 (red), together with Snt309 (dark purple) and the C-terminal region of Cef1 (Cdc5; dark orange), form a helical bundle that runs, as a self-contained arm II domain, parallel to the main body of the *S. pombe* spliceosome and is only bound to it by thin structural elements (10). There is no density at this corresponding position in the B<sup>act</sup> complex that would correspond to that in the *S. pombe* spliceosome – either in the 5.8 Å model or in the non-masked low resolution B<sup>act</sup> model shown here. Rather, in the latter model there is a density element that lies orthogonal to the central part of the main body in the front view (called front bar

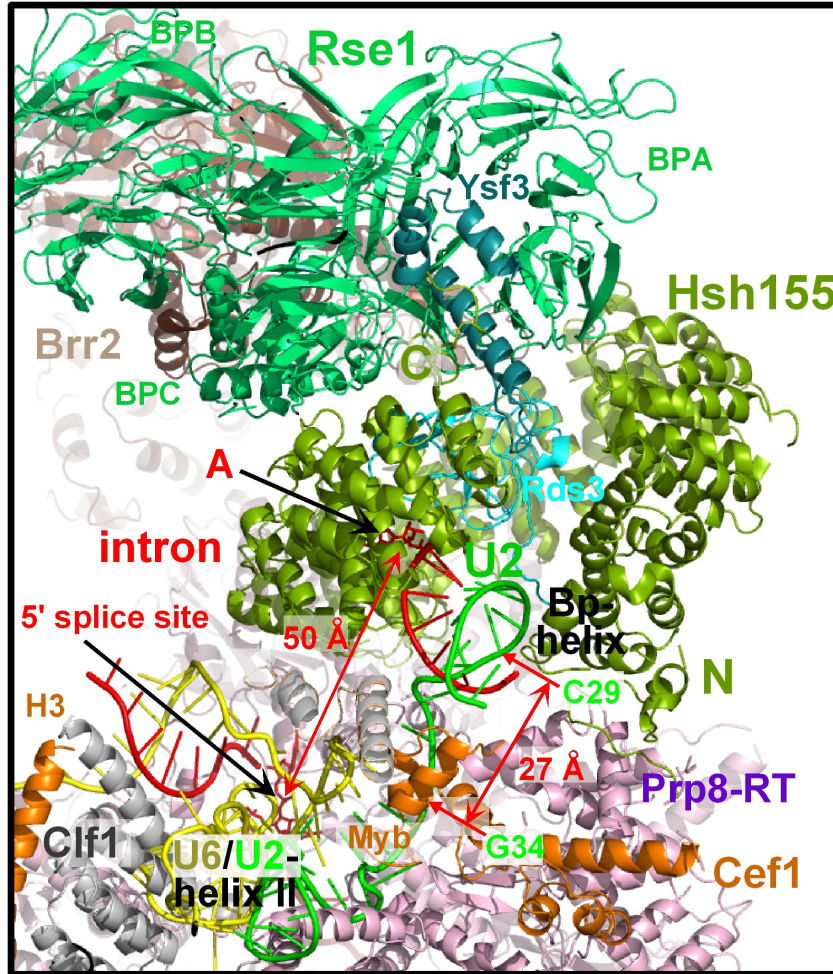
in Fig. 1A) and is suitably sized to accommodate the helical-bundle domain with the Prp19 core. The non-masked model of B<sup>act</sup> was aligned by using the U5 proteins with the structure of the *S. pombe* ILS, and the position of the Prp19 helical bundle was deduced.



**Fig. S14**

**Structure of the yeast SF3b core complex in the B<sup>act</sup> spliceosome and in the crystal structure of a protease-resistant human SF3b core complex.** Ribbon representation of SF3b proteins in (A) the crystal structure of the human SF3b core complex comprised of SF3B155's entire C-terminal HEAT repeat domain, SF3b130 (yeast Rse1) and the small proteins SF3b14 (yeast Rds3) and SF3b10 (yeast Ysf3) (37) and (B) in the B<sup>act</sup> complex. Left: side views, right: bottom views. SF3b14 (yeast Rds3) is shown in blue in a space

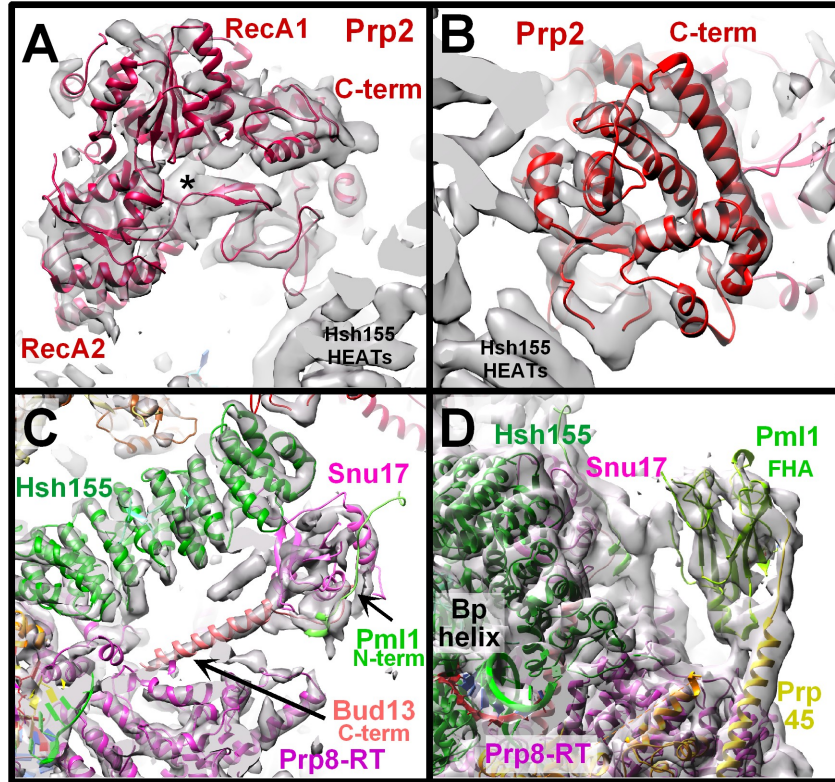
filling model in the middle of the structure. Superposition of the HEAT domains from the two orthologs shows that the N-terminal H1–H5 and C-terminal H16–H20 regions are restructured versus the central H6–H15 region. In this way, HEAT repeats H1 and H19 come to lie almost on top of each other and with the distance between them shortened from 24 Å (in the crystal structure) to 18 Å (in B<sup>act</sup>). Given that the isolated yeast SF3b complex has a similar structure, this suggests that the Hsh155 HEAT repeats are restructured after incorporation of SF3b into the spliceosome. SF3b130's (yeast Rse1) three β propeller (WD40) clusters (BPA+ BPB +BPC) are also indicated. An RNA density element consisting of the U2/BS RNA helix is located in the opening between the terminal HEAT repeats of Hsh155 in the B<sup>act</sup> structure (see below).



**Fig. S15**

**Location of the U2/BS RNA helix, Hsh155 and the 5' splice site.** The U2/BS RNA helix is located between the terminal HEAT repeats of Hsh155 and the BS adenosine is spatially separated from the scissile bond of the 5' ss by 50 Å. The 5' terminal nucleotides of U2 of the U2/BS helix (U2-C29) is spatially separated from the 3' terminal U2 nucleotides of U2/U6 helix Ia (U2-G34) by 27Å.



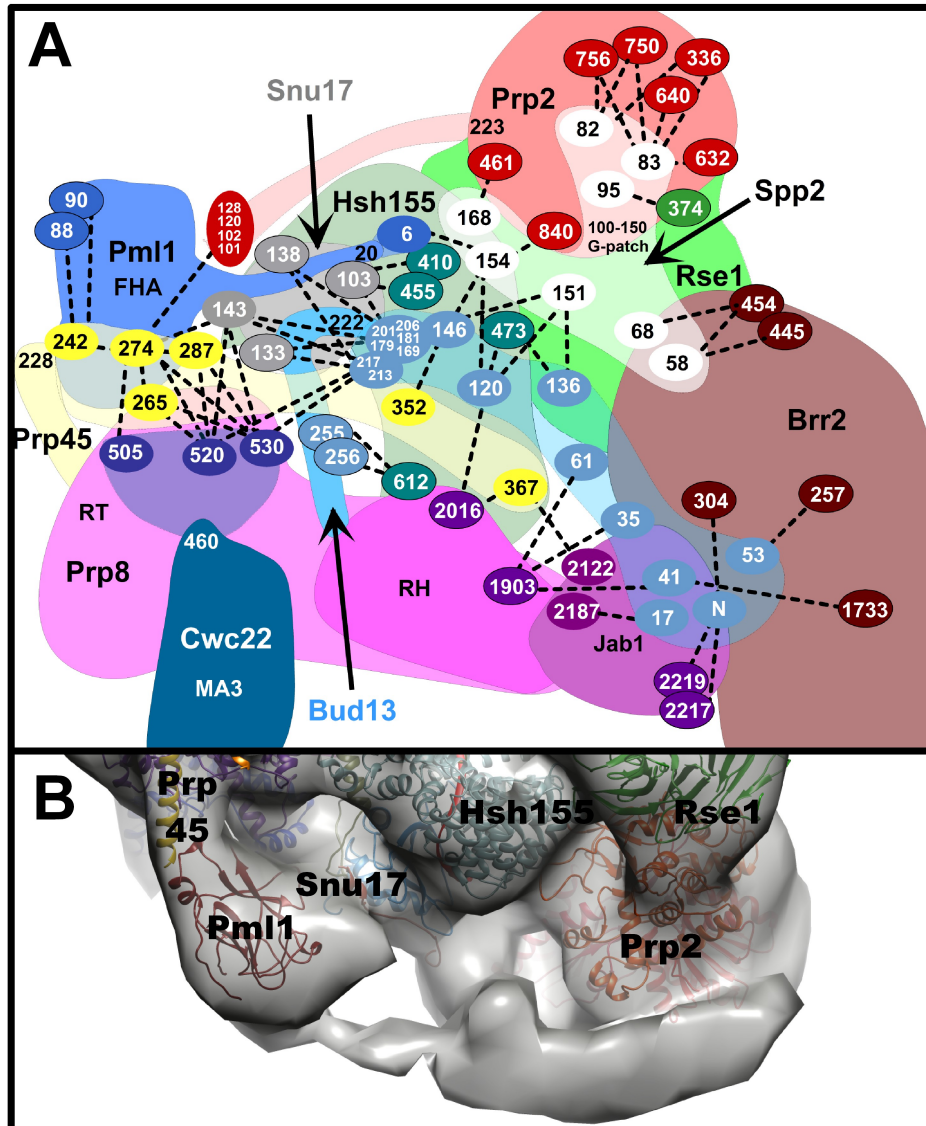


**Fig. S16**

**Location of the Prp2 RNA helicase and the RES proteins.** (A) Close-up view of the fit of the Prp2 RecA domains, into the Prp2 density associated with Hsh155's HEAT domain (see also Fig. 6A) in the B<sup>act</sup> model. The asterisk indicates unassigned density likely to be occupied by parts of Spp2. (B) Close-up view of the fit of Prp2's C-terminal domain, including its OB-fold domain, into the corresponding Prp2 density of the B<sup>act</sup> model. (C) Expanded view of the B<sup>act</sup> steep slope (see Fig. 1A), showing the fit of Hsh155's HEAT repeats, Snu17's RRM and the C-terminal region of Bud13 into the corresponding densities. The Bud13 C-terminal helix occupies a density tube that continues further down to Prp8-RT/En. Two crosslinks of Snu17 to HEAT repeats 7 and 8 of Hsh155 support its location and the orientation of this central part of the RES

complex (Table S1). **(D)** Pml1's N-terminal FHA (forkhead-associated) domain forms a bridge between Snu17 and the C terminus of the Prp8-RT-associated Prp45 helix.

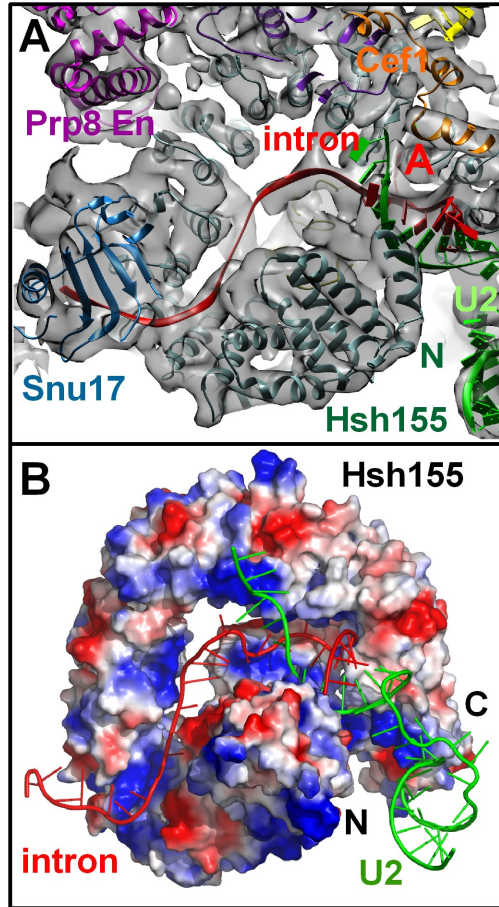




**Fig. S17**

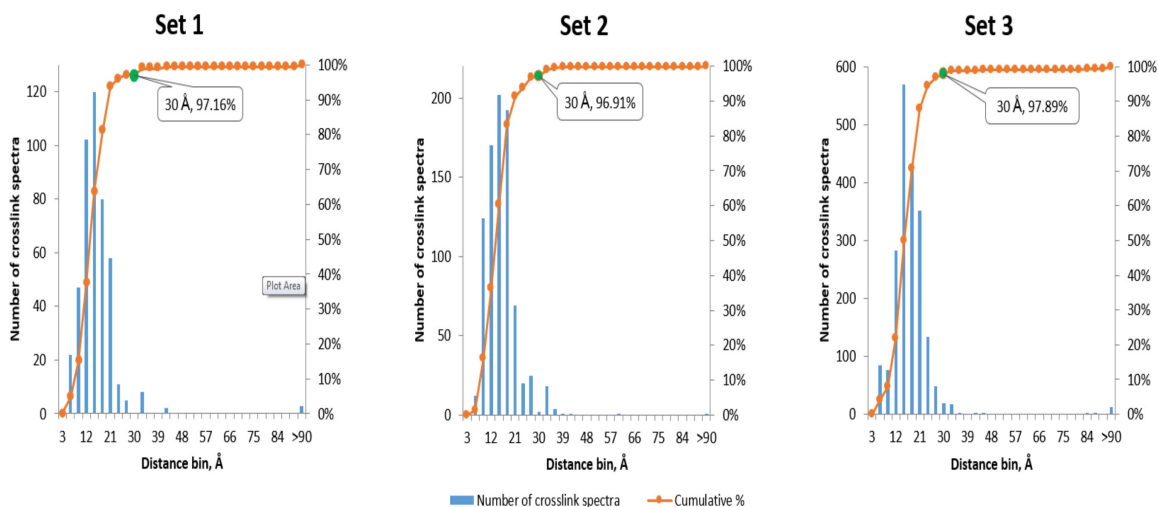
**Intermolecular crosslinks support the juxtaposition of Spp2 with Prp2 and the RES complex, and suggest the position of the C-terminal parts of Cwc22 and Prp45. (A)** Schematic diagram of the back of the front view of the  $B^{act}$  complex (see Figure 1A). Intermolecular crosslinks between the protein domains are shown. Numbers indicate the positions of crosslinked lysine residues (connected by stippled lines) in each protein. Numbers in ovals with black borders indicate the residues in the modeled parts of the proteins, whereas those in ovals without borders are residues within non-modeled

regions. The latter are arbitrarily placed close (less than 30 Å) to their crosslinking partners observed in our model. Numbers without ovals represent the terminal residues of protein regions modeled in the high resolution B<sup>act</sup> structure. Red ovals represent Prp2 residues, white – Spp2, green – Rse1, turquoise – Hsh155, brown – Brr2, violet – Prp8, purple – Cwc22, yellow – Prp45, blue – Pml1, light blue – Bud13 and grey – Snu17. Tentative localization of the non-modeled regions of a given protein is indicated by semi-transparent coloring. Although projected onto the plane of the paper, the positions in space of the crosslinked lysines correspond to their positions in the 3D structures of their respective protein domains. The maximum observed length for any crosslink was less than 30 Å. **(B)** Top view shows unassigned regions of the unmasked EM density likely to be occupied by flexible parts of RES, Spp2, Prp2, Hsh155, Cwc22 and Prp45 proteins not resolved in 5.8 Å EM map. Prp45 appears to play a role in stabilizing the various protein-protein interactions.



**Fig. S18**

**Path of the intron's 3' end across the Hsh155 HEAT domain in the yeast  $B^{\text{act}}$  complex.** **(A)** Path of the intron across the Hsh155 HEAT repeat spiral. Clear densities are present for the intron just after the branch site and Hsh155 HEAT repeat H6 on the opposite site. The density for the central nucleotides of the BS-3'SS region of actin pre-mRNA (UCCGAUU) is not well resolved and thus the placement is ambiguous. **(B)** The electrostatic surface potential of the Hsh155 HEAT domain with the path of the intron's 3' end (red). The RNA lies in a basic channel (blue), well-separated from the red acidic patches. Upon exiting the ring, the RNA passes through a clamp-like structure (bottom left).



**Fig. S19**

**Distribution of the  $\text{Ca-Ca}$  distances between BS3-crosslinked residues.** The Euclidian distances were measured in the 5.8 Å model of the yeast  $\text{B}^{\text{act}}$  complex using PyMOL (<http://www.pymol.org>). More than 95% of all crosslink-assigned spectra correspond to crosslink distances of 30 Å or less.

**Movie S1**

Hsh155 – SF3b HEAT domain transformation

**Movie S2**

yB<sup>act</sup> rotation

**Table S1.**

**Protein and model building information for all modeled yeast B<sup>act</sup> proteins.** Protein names, their molecular weight and detailed information about the model building process are provided.

**Table S2.**

**BS3-crosslinks of proteins in the yeast B<sup>act</sup> complex.** Statistics (Spectral Counts and Score<sub>max</sub>) of the CX-MS data for the proteins of the purified yeast B<sup>act</sup>. “Inter” and “Intra” indicate inter-protein and intra-protein crosslinks, respectively. Numbers in the Residue 1 and 2 columns indicate the position of the crosslinked lysine or N-terminal methionine residue. Euclidian C $\alpha$ -C $\alpha$  distances between crosslinked residues are given in Ångström (column “Å”). The Table includes crosslinks of all proteins of the B<sup>act</sup> complex, even if they were not observed/modeled into the EM density.

**Table S3.**

**MolProbity validation of the final RNA model of the yeast B<sup>act</sup> complex.** For the clash score, a percentile is given with the 100<sup>th</sup> percentile being the best structure among structures of comparable resolution (N=1784, all resolutions).

**Table S1: Positioning of proteins in the cryo-EM structure model of *S. cerevisiae* B<sup>act</sup>**

Protein	Domain	Positioning
Prp8 279.5 kDa 2413 aa	NTD1 131-737	The <i>S. cerevisiae</i> NTD1 structure (PDB 5GAN), determined as part of the cryo-EM investigation of the <i>S. cerevisiae</i> (S.c.) tri-snRNP (13) was used for rigid-body fitting followed by refinement with the COOT program (62). The position and structure of NTD1 in B <sup>act</sup> are similar to those observed in the human (16) and S.c. tri-snRNP (13-15) and the ILS (10).
	NTD2 738-872	The model of the orthologous <i>S. pombe</i> (S.p.) structure (PDB 3JB9) determined by cryo-EM of the S.p. ILS complex (10) was used for rigid-body fitting followed by refinement with COOT. The linker between NTD1 and NTD2 was reconstructed with COOT. The position and structure of NTD2 in B <sup>act</sup> are equivalent to those in the ILS (10).
	RT/En 873-1838	The RT/En structure (PDB 5GAN) determined by cryo-EM of the S.c. tri-snRNP (13) was used for rigid-body fitting followed by refinement with COOT. Several loops (1039–1043, 1201–1213, 1375–1385, 1402–1427,1614–1623) were manually adjusted or rebuilt. RT/En position and structure in B <sup>act</sup> are similar, but not identical, to those in the ILS (10).
	RH 1839-2078	The RH structure (PDB 5GAN) determined by cryo-EM of the S.c. tri-snRNP (13) was used for rigid-body fitting followed by refinement with COOT. The loops 1831–1839 and 1858–1874 were adjusted or rebuilt manually. The position of RH in B <sup>act</sup> is different from those observed in the human (16) and S.c. tri-snRNP (13, 15) and the ILS (10).
	Jab1 2148-2398	The Jab1-Brr2 complex of the S.c. structure (PDB 5DCA) determined by X-ray analysis of the co-crystal with Brr2 (19) was used for rigid-body fitting followed by refinement with COOT.
Snu114 114.0 kDa 1008 aa	D1 111–460	The Snu114 structure (PDB 5GAN) determined by cryo-EM of the S.c. tri-snRNP (13) was used for rigid-body fitting followed by refinement with COOT. The Snu114 position and structure in B <sup>act</sup> are equivalent to those of the human (16) and S.c. tri-snRNP (13, 15) and the ILS (10).
	D2 461–598	
	D3 599–676	
	D4 677–852	
	D5 853–941	
	C-term 942–998	
Brr2 246.1 kDa 2163 aa	NC-CC 453-2163	For rigid-body fitting of the two helicase cassettes, the structure of the Jab1-Brr2 complex of S.c. (PDB 5DCA) was used (19) followed by refinement with COOT. The position of Brr2 in B <sup>act</sup> is very different from the corresponding position in the human tri-snRNP (16), and Brr2 is differently bound and oriented compared with the S.c. tri-snRNP (13, 15).
	PWI 284-294	For rigid-body fitting of the PWI domain, the Jab1-Brr2 co-crystal (67) (PDB 5DCA) was used. The domain was fitted into a density on top of the NC cassette close to the Prp8-Jab1 domain, and this was followed by refinement with COOT. The position of PWI in the B <sup>act</sup> complex is different from, but close to, the position found in the Brr2-Jab1 crystal structure and in the human tri-snRNP (16).
	NHD 115-191	To identify the position of the small NHD domain, its position in the human tri-snRNP (PDB 3JCR) relative to the easily locatable Brr2 NC-CC cassettes was used. The density for the NHD domain is well-defined and fits well with the protein's 3D structure; it places the NHD in B <sup>act</sup> in a location and orientation relative to NC-CC that are similar to the corresponding location and orientation found in the human tri-snRNP. The S.c. structure of NHD



		(PDB 5DCA) determined by X-ray analysis of a co-crystal with Brr2 (19) and modified according the conformation in the human tri-snRNP was used for fitting.
U5-Sm	Sm domains of SmB, SmD1, SmD2, SmD3, SmE, SmF, SmG	For rigid-body fitting of the U5-Sm, its structure determined by cryo-EM of the S.c. tri-snRNP (PDB 5GAN) (13) was used. The U5-Sm position in B <sup>act</sup> is equivalent to that of the human (16) and S.c. tri-snRNP (13, 15) and the ILS (10).
Cwc2 38.4 kDa 339 aa		For rigid body fitting the orthologous S.p. structure (PDB 3JB9) determined by cryo-EM of the ILS complex (10) was used, followed by refinement with COOT. The Cwc2 position is equivalent to the one in the ILS (10).
Ecm2 40.9 kDa 364 aa	8–284	For rigid-body fitting the orthologous model of the S.p. structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used; this was followed by refinement with COOT. The position of Ecm2 is equivalent to its position in the ILS (10). For refinement COOT was used.
Bud31 18.4 kDa 157 aa	17–154	For rigid-body fitting of Bud31, the S.c. structure (2MY1) determined by crystallography (68) was used; this was followed by refinement with COOT. The position of Bud31 in B <sup>act</sup> is equivalent to its position in the ILS (10).
Prp17 52 kDa 455 aa	WD40 150–455	A structural model of the WD40 domain was produced by using the Robetta server. It was placed in such a way into a poorly resolved density of the non-masked low-resolution structure, just above Cwc2 und Ecm2, so that the observed crosslinks with Cwc2 and Ecm2 would be possible. Although exact positioning was not possible, the principal orientation is determined by the crosslinks (see Fig. S12). In the S.p. ILS structure (10) the only part of Prp17 identified was a helical N-terminal region not conserved in the S.c. sequence.
Prp45(69) 42.5 kDa 379 aa	31–235	An orthologous model of the S.p. structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used for rigid-body fitting followed by refinement with COOT. Well-fitting densities for the helical and $\beta$ -sheet regions were found in the B <sup>act</sup> structure at positions equivalent to those found in the ILS. The fitted structure ends C-terminally, with a helix tightly attached to the RT end of the Prp8-RT/En domain. The remaining C terminus, which is not present in the ILS model (10), on the basis of evidence from crosslinks (see Fig. S17), runs around the back side of the B <sup>act</sup> complex, passing the RES-complex proteins, and reaches the vicinity of the RH and Jab1 domains of Prp8. A short stretch (229–236) was modeled into a thin thread of density running along the Pml1-FHA domain.
Prp46(69) 50.7 kDa 451 aa	WD40 107–446	For rigid-body fitting, an orthologous model of the S.p. structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used, followed by refinement with COOT. The position of Prp46-WD40 is equivalent to its position in the ILS.
Cef1 67.7 kDa 590 aa	tandem Myb 12–110	For rigid-body fitting an orthologous model of the S.p. structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used; this was followed by refinement with COOT. The position of Cef1-Myb is equivalent to its position in the ILS.

	H1 143–160 H2 164–185	Densities as observed for the <i>S. pombe</i> H1 and H2 $\alpha$ -helices are clearly missing in B <sup>act</sup> and may be restructured instead into a H1 helix rotated by 110 ° and a kinked $\alpha$ -helix (Fig. S8). The C-terminal part of the latter would be situated in a density close to the 5'ss, the N-terminal part instead would remain close to the U6 snRNA turn. However, it cannot be excluded that the parts of Cef1 corresponding to the <i>S. pombe</i> H1 and H2 helices are not visible in the EM map due to high flexibility. Although the conclusion that the 5'ss is clearly shielded by protein elements can be drawn, an unambiguous assignment to a specific protein is not possible.
	H3 230–259	In the ILS upstream of H2 a straight, 34-aa-long helix of unknown sequence is positioned on the loop side of the N-terminal Clf1/Syf3 TPRs. In the B <sup>act</sup> complex a density rod at a similar position, but of shorter length, is also present above the Clf1/Syf3 N-terminal TPRs. Modeling by the Robetta server revealed a long helix downstream of H2. The Clf1/Syf3 internal crosslinks support the presence of a helix between amino acids 230 and 259 (Fig. S12) and the helix model of this stretch fits perfectly into the density rod. Crosslinks to the Clf1 TPR support not only the helix placement but also its orientation with the N terminus to the outside and its C terminus pointing to the catalytic center, as observed in the ILS model. Refinement was performed with COOT.
	C-helix 500–590	An orthologous model of the <i>S.p.</i> structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used to model the helical bundle that the C-terminal helix of Cef1/Cdc5 forms with helices of Prp19 and Snt309. The helical bundle fits into the elongated density bar of the front view. This density is present only in the non-masked lower-resolution structure, and an exact placement is not possible.
Prp19 56.5 kDa 503 aa	HD 76–140	An orthologous model of the <i>S.p.</i> structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used to model the helical bundle that four copies of the Prp19 helical domain (HD) form with helices of Cef1/Cdc5 and Snt309. The helical bundle was placed as described above (Cef1/Cdc5, C helix).
Snt309 20.7 kDa 175 aa	1–175	An orthologous model of the <i>S.p.</i> structure (PDB 3JB9) as determined by cryo-EM of the ILS complex (10) was used to model the helical bundle that Snt309 forms with helices of Cef1/Cdc5 and Prp19. The helical bundle was placed as described above (Cef1/Cdc5, C helix).
Syf1 100.2 kDa 859 aa	TPR 393–654	For modeling the TPR domain of <i>S.c.</i> protein Syf1, the sequence of the human orthologue Xab2 was used to produce a first model with the Robetta server. Xab2 was used because in the <i>S.c.</i> sequence an <i>S.c.</i> -specific insert (170–216) prevents TPR continuity. The Xab2 model was then bent to fit into the non-masked B <sup>act</sup> density that resembles the Cwf3/Syf1 density of the <i>S.p.</i> ILS. From the Xab2 structure the <i>S.c.</i> orthologue model was then built. The ILS model of the Cwf3/Syf1 protein covers only a short stretch of sequence (homologous to the <i>S.c.</i> Syf1 sequence position 498–734). From this stretch an orthologous model was created and used to replace the corresponding stretch in the model built with Xab2. A short region (393–654) of Syf1 passes through a density of the masked high-resolution B <sup>act</sup> structure. Here, the TPRs show excellent fit with TPR-typical densities. Refinement was performed with COOT.
Clf1/Syf3 82.4 kDa 687 aa	TPR 39–272	In the <i>S.p.</i> ILS model (10) only for the N-terminal Cwf4/Clf1 TPRs was the sequence (homologous to the <i>S.c.</i> Clf1 sequence 36–291) provided. An orthologous <i>S.c.</i> model was generated and could be fitted with only slight adjustments into TPR-typical densities of the high-resolution B <sup>act</sup> structure. In the B <sup>act</sup> , the positioning of the N-terminal TPR close to the catalytic center corresponds to the position in the ILS model. For the remaining C-terminal TPRs no high-resolution density is present in the masked structure; density is

		only found in the lower-resolution structure obtained without application of a mask. For these C-terminal Clf1 TPRs, a model produced by the Robetta server was used; the model was fitted by bending it into the density corresponding to a similar density region in the ILS structure. Crosslinks between Syf1 and Clf1 TPRs (Fig. S12) verify this ILS-based arrangement of the Syf1 and Clf1 TPRs. COOT refinement was applied in areas with sufficient resolution.
Cwc22 67.3 kDa 577 aa	MIF4G 11–263	Using the structure of this domain in the human Cwc22 orthologue (PDB 4C9B), determined by X-ray analysis of the co-crystal with eIF4AIII (33), an orthologous model was produced and fitted into a prominent density of the non-masked, low-resolution B <sup>act</sup> structure. This density protrudes obliquely out of the central main body and has exactly the shape of the MIF4G domain. One strong crosslink (K369 to K176 of Snu144) and a minor one (K362 to K176 of Snu114) verify the position and orientation of the MIF4G domain. The MIF4G is bound to the D1 domain of Snu114, where a lasso-like loop of the Prp8-NTD1 domain encircles a little protrusion of the D1 domain. The sequence region 425–430 of the NTD1 lasso seems to contribute to the Cwc22-MIF4G binding site. Refinement was performed with COOT.
	MA3 280–533	A model of the region containing the MA3 domain was produced by the Robetta server and fitted with slight adjustments perfectly into a well-resolved density above the MIF4G domain. It is attached to the linker domain of Prp8-RT/En, with its N-terminal helix in contact with Prp8-RH and its C terminus close to the RES complex region. The extreme C-terminal region of Cwc22 could not be placed into a B <sup>act</sup> density, but a network of crosslinks places it in the RES complex region (see Fig. S17).
Cwc24 29.7 kDa 259 aa	63–123	Submission of the Cwc24 sequence to the Robetta server resulted in the separation of the small Cwc24 protein into several domains. N-terminal amino acids 93, 89 and 123 of Cwc24 form a network of crosslinks to the NTD1 and RH domains of Prp8 (see Fig. S9). Amino acid 63 crosslinks to the Jab1 domain of Prp8. In the high-resolution structure of B <sup>act</sup> we cannot discern a clear density, which could accommodate this region of the Cwc24 protein.
Hsh155 110.0 kDa 971 aa	HEAT repeats 126–960	The structures of the four S.c. SF3b proteins were modeled according to the crystal structure of the human protease-treated SF3b complex consisting of SF3b155/Hsh155, SF3b130/Rse1, SF3b14b/Rds3 and SF3b10/Ysf3. In the S.c. B <sup>act</sup> structure well-resolved and well-defined densities are immediately visible for the Hsh155 HEAT repeats forming a spiral of parallel density rods and the Rse1 WD40 domains visible as three similar, protruding ring densities. The entire homology modeled S.c. SF3b complex docks easily into the B <sup>act</sup> density, but some significant adaptations are necessary. While the central (8–15) HEAT repeats can be docked as a rigid body, the N- and C-terminal repeats have to be moved upward and downward, respectively, and both need to be tilted inwards, thus narrowing the diameter of the spiral. As Rse1 is mainly connected to the C-terminal HEAT repeats it is positioned more sideward compared to the crystal structure. The small Ysf3 protein is part of the Hsh155-Rse1 binding region and its density is well recognizable in the B <sup>act</sup> structure. In the crystal structure the Rds3 protein has a central position within the Hsh155 spiral. In the equivalent position a well-defined density in the B <sup>act</sup> structure perfectly fits Rds3. All four protein structures were refined by using COOT.
Rse1 153.8 kDa 1361 aa	3x WD40 56–1331	
Rds3 12.3 kDa 107 aa	6–95	
Ysf3 10.0 kDa 85 aa	5–73	
U2-Sm	Sm domains of SmB, SmD1,	In the high-resolution structure of B <sup>act</sup> no other density element apart from the one at the bottom housing U5-Sm has the shape typical of the heptameric Sm ring. In the non-masked lower-resolution B <sup>act</sup> structure, however, such a density can be observed in the upper right corner of the front view; this density contributes to a large extent to the steep slope. In this density the U2-

	SmD2, SmD3, SmE, SmF, SmG	Sm ring with the two bound U2-specific proteins Leal and Msl1 and the SLIV of U2RNA can be placed as the complex structure determined within the S.p. ILS (PDB 3JB9) by cryo-EM (10).
Leal 27.2 kDa 238 aa	1–185	
Msl1 12.8 kDa 111 aa	24–111	
Prp9 63.0 kDa 530 aa	1–378	The structure of a large part of the S.c. SF3a complex was solved by crystallography (66). For this large, roughly Y-shaped structure (PDB 4DGW), no matching density is present in the high-resolution structure of the B <sup>act</sup> complex. In the non-masked lower-resolution B <sup>act</sup> structure a suitably sized forked density is present that connects the branch-point helix and the region containing U2-SLII of the high-resolution part with the density of the less well-resolved structure into which the U2-Sm complex fits. Since the resolution of the forked density does not allow unambiguous positioning of the arms, the positioning of SF3a is at present arbitrary.
Prp11 29.9 kDa 266 aa	101–253	
Prp21 33.0 kDa 280 aa	89–228	
Snu17/Ist3 17.1 kDa 148 aa	RRM 26–135	Snu17 is the central RES complex component and binds to the other two RES complex proteins, Pml1 and Bud13 (70). The structure of the RRM domain of Snu17 in complex with a short N-terminal sequence of Pml1 (20–43) and a C-terminal sequence (213–246) of Bud13 (PDB 2MKC) has been solved by NMR (71). Additionally, the Snu17 structure was also determined within a complex with a longer piece of the Bud13 C terminus (PDB 4UQT) (10) that also includes a short helix (240–256) at the C terminus. Merged, the two structures fit well into a density on the back of B <sup>act</sup> . This density is connected to the lower loops of Hsh155 HEAT repeats 7–9 and is framed by Prp8-RT/En, Prp8-RH and Cwc22-MA3. The Bud 13 C-terminal helix occupies a density tube that continues further down to Prp8-RT/En. Two crosslinks of Snu17 to HEAT repeats 7 and 8 (K103 to Hsh155 K410 and K455) support this location and orientation of this central part of the RES complex.
Pml1 23.6 kDa 204 aa	FHA 28–42 51–204	The structure of a large part (51–204) of the S.c. protein Pml1 (PDB 2JKD, PDB 3ELV) containing the FHA domain was determined by crystallography (72, 73). A well-fitting density is located close to the side of Snu17 where the bound Pml1 N terminus exits. In its position within the B <sup>act</sup> complex, Pml1 forms a bridge between Snu17 and the C terminus of the Prp8-RT-associated Prp45 helix. Refinement was performed with COOT.
Bud13/Cwc26 30.5 kDa 266 aa	235–266	For Bud13 only the structure of a short piece of the C terminus (222–256) is known from the Snu17-Bud13 complex NMR structure (see above, Snu17/Ist3). A network of crosslinks indicates that the large N-terminal part extends from Snu17 up to the Brr2-Jab1 region of the B <sup>act</sup> complex. The C-terminal helix was further modeled into the density extension (see above, Snu17/Ist3).
Prp2 99.8 kDa 876 aa	RecA1 186–397	The Prp2 RecA domains and the C-terminal domain were modeled with Prp43 as a template (PDB 2XAU) (74). The modeled C-terminal domain fits perfectly into a density region connecting the OB-fold of that domain to Hsh155 HEAT repeats 7 and 8. The RecA domains fit into two densities that are attached on the outside of the C-terminal domain which establishes contact with the main body of B <sup>act</sup> . Both RecA domains have no contact to any other high-resolution B <sup>act</sup> density. The RecA domain densities are in close proximity to the mask applied for producing the high-resolution B <sup>act</sup> structure and are less well defined than the C-terminal domain is.
	RecA2 401–575	
	C- term/OB- fold	

	587–864	Refinement was performed with COOT.
Spp2 20.6 kDa 185 aa		The structure of Spp2 has not yet been determined. Not surprisingly, evidence from a network of crosslinks places Spp2 in the B <sup>act</sup> complex close to Prp2 (see Fig. S17). The N-terminal Spp2 region resides in the vicinity of Brr2, while the C-terminal region is located closer to the RES complex. The central domain seems to be the main Prp2-binding region. The known Prp2-binding sequence, the G-patch domain, links the central domain to the C-terminal domain. No crosslinks are at present available to allow positioning of the G-patch sequence region.

**Table S2: BS3-crosslinks of proteins in the yeast B<sup>act</sup> complex**

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>			
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3					
Inter	Brr2	Bud13/Cwc26	71	115				3			3,40	3	3,40			
			74	115				2			7,06	2	7,06			
			91	53					1			3,42	1	3,42		
			304	2				5		4	14,17	11,82	9	14,17		
				15						2			5,65	2	5,65	
				35						1			3,46	1	3,46	
				414	64					1			2,20	1	2,20	
				417	53						1		7,12	1	7,12	
					61						1		1,81	1	1,81	
				1733	41					4			3,26	5	3,26	
				Cwc24	748	256			1			0,20		1	0,20	
					2109	29				2			7,16	4	7,35	
				Cwc27	1504	213			1			0,94		2	2,00	
					1529	225			1	3		0,47	5,11	5	7,64	
				Ecm2	82	356					1			1	2,03	
				Hsh155	82	35					1			1	1,49	
				Prp17	1414	153			1			0,97		1	0,97	
				Prp2	2	211					1			1	6,22	
					28	211					2			2	7,29	
					1437	45					1			1	5,60	
					1623	2					1			1	2,31	
					2070	2					3			3	8,79	
					2109	2					10			10	10,91	
					2116	2					1			1	7,51	
					2121	2					35			35	16,89	
				Prp8	2	1903					2			2	9,54	
					25	1903				1			1,15	1	1,15	
					31	1903			1			0,32		1	0,32	
					50	2016					1			1	7,68	
					74	2016					3			3	8,59	
					91	2154					1			1	8,47	
						2284					1			1	1,15	
					304	2167					1			1	6,73	
						2187					1			1	6,89	
						2213					2			2	5,60	
					1055	2108					2			2	5,65	
						2149		17,5			1			1	5,78	
						2154		16,4			6			9	5,43	
				Prp9	152	519				3			5,43	1	0,14	
				Rse1	304	556				1			0,14	2	6,29	
					414	556						7		7	8,66	
					417	556						1		1	3,42	
					758	1269						1		1	1,69	
					795	1269						1		1	4,89	
					967	556			83,3			1		1	6,22	
					SmD2	1904	59				1			2,76	1	2,76
					Snt309	748	94				1			0,55	1	0,55
				Snu114	2	955					1			1	5,16	
					7	955					1			1	4,08	
				Spp2	74	133					1			1	6,69	
	85	133						1			1	3,56				
	91	58						3			3	15,52				
			133			1		5		0,62	6	16,93				
		168	38					1			1	4,12				
		445	38					1			1	5,97				
			58			1			3,83		1	3,83				
		454	38					5			5	3,46				
			68			2		1	1,65		3	1,65				
		769	38					4			4	10,34				
			46					1			1	4,44				
	Syf1	259	362			1			0,58		1	0,58				
		Brr2	2	304			5		4	14,17		9	14,17			
	Bud13/Cwc26	15	304					2			2	5,65				
		35	304						1			1	3,46			
		41	1733					4			3,26	5	3,26			
		53	91						1			1	3,42			
			417						1			1	7,12			
			61	417					1			1	1,81			
			64	414					1			1	2,20			
			115	71					3			3	3,40			
				74					2			2	7,06			
		Clf1	115	458					1			1	4,06			
		Cus1	255	40			1			0,79		1	0,79			
		Cwc22	201	520					1			1	3,45			
	213		520					2			2	6,91				
			530			2		1	3,05		3	3,05				
		217	520					1		1,88	1	1,88				
	Cwc24	115	4			1			3,23		1	3,23				
		213	100			1			1,03		1	1,03				



Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>C<sub>max</sub></sub>			Total spectral count	Best Score <sub>C<sub>max</sub></sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
		Hsh155	120	473			3	1		2,42	2,23	4	2,42
				511				2		4,13		2	4,13
			130	473				4			9,36	4	9,36
				511				1			13,86	1	13,86
			136	473				1			2,03	1	2,03
			255	612	20,0	1	4	15	4,45	7,00	8,53	20	8,53
			256	612	16,7		2	5		0,53	5,10	7	5,10
		Prp2	115	567				1			0,09	1	0,09
			181	2				1			6,85	1	6,85
		Prp45	136	367				1			5,55	1	5,55
			146	352			1	1	2,53		2,42	2	2,53
		Prp8	2	2217			1		0,63			1	0,63
				2219			1	1	5,15		1,47	2	5,15
			15	2187				2			11,00	2	11,00
			17	2187			2		3,68			2	3,68
			35	1903			3		1,92			3	1,92
			41	1903			2		2,22			2	2,22
			53	2016				1			8,14	1	8,14
			61	2016				1			2,19	1	2,19
			68	2187				2			4,23	2	4,23
			120	2016			1			0,68		1	0,68
			181	1926				2			4,40	2	4,40
			255	1589	33,4			2			7,71	2	7,71
		Rse1	115	1269				1			5,69	1	5,69
		Snu17/Ist3	169	133			2	1		4,84	2,06	3	4,84
				138		4	7	4	3,39	6,93	8,23	15	8,23
			179	138			4	6		4,88	14,63	10	14,63
				143		1	2	4	2,73	1,41	9,46	7	9,46
			180	138				2			6,88	2	6,88
			181	133			1	3		3,77	5,55	4	5,55
				138		12	17	48	10,00	6,95	7,94	77	10,00
				143			2	2		0,52	1,85	4	1,85
			201	138		1	4	16	4,09	3,27	9,39	21	9,39
				143				6			5,09	6	5,09
			206	138		3		4	11,35		7,72	7	11,35
				143		1			0,97			1	0,97
			213	133		3	5	3	6,15	6,66	6,20	11	6,66
				138		5	6	5	8,35	7,00	9,39	16	9,39
				143		1			0,90			1	0,90
			244	10			2			4,43		2	4,43
		Spp2	115	151				8			10,72	8	10,72
			120	151		13		17	12,61		9,30	30	12,61
				154		3			1,97			3	1,97
			136	151		3		7	7,57		13,17	10	13,17
				154				1			5,35	1	5,35
				182				2			4,89	2	4,89
			146	151		2		1	0,69		2,77	3	2,77
				154		1		2	1,81		9,42	3	9,42
			151	181				1			2,59	1	2,59
	Bud31	Cwc22	10	495				1			1,53	1	1,53
		Cwc27	35	78				2			4,58	2	4,58
		Ecm2	40	230	39,1			1			9,34	1	9,34
	Cef1	Clf1	240	113	11,1	6	9	4	6,06	8,32	11,14	19	11,14
			247	111	14,5	2	1	3	7,51	2,12	8,45	6	8,45
				113	11,5	2	1		2,42	0,29		3	2,42
			251	111	14,5		1			1,16		1	1,16
				113	13,6	2	2		10,44	4,75		4	10,44
			318	507				1			2,52	1	2,52
		Isy1	294	42				1			1,49	1	1,49
		Lea1	359	205		1			0,18			1	0,18
		Ntc20	305	94				2			3,90	2	3,90
		Prp11	22	36			1			1,92		1	1,92
		Prp19	444	108		5		13	4,63		6,83	18	6,83
			454	130		2		2	3,58		5,03	6	9,32
				135			1			2,63		1	2,63
			496	107		3	3	16	8,53	2,42	8,46	22	8,53
				108		3	5	14	1,87	7,01	5,71	22	7,01
			500	108		21	23	220	14,32	14,03	16,95	264	16,95
			558	108			1			7,46		1	7,46
		Prp2	263	732			1			5,68		1	5,68
		Prp8	166	98		1			0,62			1	0,62
			294	1910		3		1	2,80		1,46	4	2,80
			496	2192		1			0,46			1	0,46
		SmB	187	76		1			0,95			1	0,95
		SmD3	321	85		1			0,46			1	0,46
		Snt309	187	26				1			1,36	1	1,36
		Syf1	293	770		3	4	2	3,68	4,58	3,13	9	4,58
			294	770				1			1,22	1	1,22
			296	770			1			0,78		1	0,78
			312	770		1			2,91			1	2,91
		Syf2	239	173		3	1		4,95	0,55		4	4,95
			240	159				1			3,73	1	3,73
				173		5	6	10	7,61	11,75	9,07	21	11,75

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			247	159			1			1,07		1	1,07
				173				4		3,71	6,44	10	6,44
			251	173		2	1	2	4,91	1,42	8,77	5	8,77
			259	173		1			0,55			1	0,55
	Cif1	Bud13/Cwc26	458	115				1			4,06	1	4,06
		Cef1	111	247	14,5	2	1	3	7,51	2,12	8,45	6	8,45
				251	14,5			1		1,16		1	1,16
			113	240	11,1	6	9	4	6,06	8,32	11,14	19	11,14
				247	11,5	2	1		2,42	0,29		3	2,42
				251	13,6	2	2		10,44	4,75		4	10,44
			507	318				1			2,52	1	2,52
		Cus1	24	202		1			4,36			1	4,36
				289		2			2,29			2	2,29
		Cwc2	24	236		1			4,19			1	4,19
		Cwc21	25	62			4	1		0,30	0,91	5	0,91
		Ecm2	24	164				2			4,54	2	4,54
			59	116			1	2		0,56	2,98	3	2,98
			668	230				1			2,55	1	2,55
		Isy1	529	104		1			3,23			1	3,23
		Ntc20	451	121			2	2		3,86	6,69	4	6,69
		Prp2	425	10				1			2,46	1	2,46
		Prp46	273	67			1	3		4,33	12,55	4	12,55
				87				3			9,49	3	9,49
				88		1		1	5,98		10,44	2	10,44
		Rds3	640	42		1	1	3	3,50	0,50	5,76	5	5,76
		SmG	668	1		1			0,08			1	0,08
		Snt309	670	94				1			4,05	1	4,05
		Snu114	670	627				1			0,28	1	0,28
		Spp2	458	151				1			2,99	1	2,99
		Syf1	180	524		3	5	3	5,16	2,04	5,79	11	5,79
				531		2		1	2,81		2,27	3	2,81
			289	653				1			8,83	1	8,83
			304	650		8	3	5	16,67	5,17	6,87	16	16,67
				653		12	10	54	17,65	11,96	13,33	76	17,65
		Syf2	25	173				4		2,24	4,57	10	4,57
			113	159		7	7	5	4,73	2,95	7,19	19	7,19
				173		4		2	10,42		7,42	6	10,42
			180	121				8			9,41	8	9,41
	Cus1	Bud13/Cwc26	40	255		1			0,79			1	0,79
		Cif1	202	24		1			4,36			1	4,36
			289	24		2			2,29			2	2,29
		Cwc2	436	10				1			5,61	1	5,61
		Ecm2	429	203				1			6,37	1	6,37
		Hsh155	102	237		1	1	1	3,85	0,69	2,42	3	3,85
				325			4	1		2,40	3,50	5	3,50
			223	722				4			2,31	4	2,31
			226	722				5			5,11	5	5,11
			236	722			13	42		8,32	7,90	55	8,32
		Hsh49	102	204				1			2,65	1	2,65
		Isy1	41	59		1			0,03			1	0,03
			48	59				1			3,17	1	3,17
			317	157				1			1,98	1	1,98
		Msl1	102	2				2			6,19	2	6,19
			128	2		1		1	8,56		5,86	2	8,56
		Prp11	223	28				4			5,60	4	5,60
				48				2			0,99	2	0,99
				60				2			3,26	2	3,26
				192				1			2,44	1	2,44
			226	11				3			4,34	3	4,34
				28				2			5,53	2	5,53
				36			4			2,17		4	2,17
				48				4			5,15	4	5,15
				60			1	2		3,83	3,98	3	3,98
				192				1			5,00	1	5,00
		Prp19	357	272			2			1,11		2	1,11
		Prp2	102	2				1			6,10	1	6,10
		Prp21						1				1	0,13
		Prp9	128	466		1	2	2	3,23	1,24	2,61	5	3,23
				468			1	1		0,38	5,52	2	5,52
				492				1			3,31	1	3,31
		Rse1	245	1342		2	11	19	1,01	7,20	11,47	32	11,47
			246	1342		5	19	8	6,41	12,16	11,56	32	12,16
			347	1149		1	2		4,32	4,68		3	4,68
		SmB	79	186				1			3,62	1	3,62
			83	138				2			4,68	2	4,68
				145				1			2,97	1	2,97
				186				1			4,86	1	4,86
			86	138				1			1,97	1	1,97
			95	138			1	2		0,44	8,99	3	8,99
			102	138				4			8,02	4	8,02
				186				1			7,29	1	7,29
			128	117		1		1	1,46		4,59	2	4,59
		SmD1	83	128				1			4,47	1	4,47

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			102	128				3			8,62	3	8,62
		SmD3	79	2				17			9,62	17	9,62
			83	2				4			9,14	4	9,14
				86				2			6,19	2	6,19
			86	2				2			4,62	2	4,62
				85				1			1,90	1	1,90
			102	2				1			3,26	1	3,26
		SmE	39	6		4	2	10	2,02	2,30	4,35	16	4,35
			48	6		1	1	16	0,86	0,64	5,50	18	5,50
			53	6				1			1,87	1	1,87
			58	6				1			2,86	1	2,86
			79	6		2			3,36			2	3,36
		SmF	58	20						2,80		2	2,80
		SmG	2	8		2			1,18			2	1,18
			16	24			2	3		2,89	8,83	5	8,83
			79	2			2	13		3,68	9,91	15	9,91
				8		1			3,97			1	3,97
			83	2				1			3,09	1	3,09
				8			1	1		1,39	2,50	2	2,50
		Syf1	317	146		4	5	3	15,41	11,09	10,86	12	15,41
			329	146				1			1,31	1	1,31
		Ysf3	102	12				1			3,31	1	3,31
				15		1		1	0,22		1,15	2	1,15
	Cwc15	Cwc24	41	228		1			0,36			1	0,36
		Ecm2	16	27		1			1,20			1	1,20
		Prp45	41	71		1		1	4,39		6,62	2	6,62
			43	71			1			1,32		1	1,32
		Prp8	151	1242				1			5,95	1	5,95
			172	1205			1			0,70		1	0,70
				1310		3			3,49			3	3,49
		Rse1	43	557				2			3,38	2	3,38
		Snu114	140	60		1			5,78			1	5,78
			145	59		1			3,47			1	3,47
				60		1	2	1	0,63	4,30	5,72	4	5,72
			150	59				2			3,96	2	3,96
				60		4	1		4,12	0,67		5	4,12
				72		1			2,10			1	2,10
				81				1			1,79	1	1,79
			151	59				1			2,82	1	2,82
				60		2	4	3	9,75	7,80	8,57	9	9,75
				72				4			13,68	4	13,68
				81				14			12,86	14	12,86
		Syf2	102	9		1			0,13			1	0,13
	Cwc2	Clf1	236	24		1			4,19			1	4,19
		Cus1	10	436				1			5,61	1	5,61
		Cwc24	152	93				1			6,93	1	6,93
		Ecm2	2	230		1	2	11	1,27	4,41	6,91	14	6,91
				233		1	6		4,08	2,53		7	4,08
			152	188			2	4		5,56	11,32	6	11,32
				189		29	26	132	14,18	8,62	14,79	187	14,79
			236	116				2			5,12	2	5,12
				119	26,3			6			6,76	6	6,76
				157		3	3	4	4,36	1,44	6,79	10	6,79
				164		2	2	5	8,28	3,07	10,52	9	10,52
				167		1	1	12	15,55	3,07	12,74	14	15,55
				173	30,7	4	2	1	2,40	2,32	5,14	7	5,14
				247	18,7	2		2	2,21		6,84	4	6,84
		lsy1	152	7		1			3,83			1	3,83
				27				1			2,53	1	2,53
				40		1			3,32			1	3,32
				42			1	1		1,48	2,56	2	2,56
		Prp17	152	207		4	2	1	9,51	5,81	1,66	7	9,51
		Prp19	286	107				2			3,09	2	3,09
				108		3	3	31	4,55	1,57	11,28	37	11,28
			320	108		4	4	7	7,67	6,27	8,30	15	8,30
		Prp46	286	56		1			0,65			1	0,65
		SmG	310	8			2			1,04		2	1,04
		Syf1	310	524				2			4,43	2	4,43
				531				1			1,35	1	1,35
			320	424		4	1	3	5,37	5,03	3,68	8	5,37
	Cwc21	Clf1	62	25			4	1		0,30	0,91	5	0,91
		Cwc27	98	234			3			0,96		3	0,96
		Prp19	98	404				1			2,36	1	2,36
		Prp2	48	756				1			10,75	1	10,75
		Prp8	12	351				1			9,11	1	9,11
				1205		3		2	3,97		4,62	5	4,62
		Snu114	12	955		6	2	6	9,33	5,91	12,44	14	12,44
	Cwc22	Bud13/Cwc26	520	201				1			3,45	1	3,45
				213				2			6,91	2	6,91
				217			1			1,88		1	1,88
			530	213		2		1	3,05		1,61	3	3,05
		Bud31	495	10				1			1,53	1	1,53
		Cwc24	294	123				1			4,16	1	4,16

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
		Cwc27	176	295		5			1,56			5	1,56
		Ntc20	203	1				1		0,36		1	0,36
		Prp11	548	28				1		1,68		1	1,68
		Prp2	520	137				1		2,20		1	2,20
		Prp45	505	130		1			2,06			1	2,06
			274			5	1	1	6,23	3,75	4,11	7	6,23
			520	265		1	1	7	5,13	4,37	11,97	9	11,97
			274			18	11	17	11,78	9,46	14,67	46	14,67
			287			4	1	7	2,44	0,74	3,90	12	3,90
			530	265		4	4	3	6,04	6,92	7,54	11	7,54
			274			16	7	14	8,37	3,25	7,13	37	8,37
			287			4	8	14	5,49	4,49	7,60	26	7,60
		Prp8	294	1435	10,3			2			13,19	2	13,19
			505	121		4			2,82			4	2,82
		Snu114	176	369	13,8	5			4,02			5	4,02
		Snu17/Ist3	520	138				1			4,91	1	4,91
			530	143		1			2,93			1	2,93
		Syf1	548	311			1			26,34		1	26,34
		Ysf3	203	15	147,7	1			0,49			1	0,49
	Cwc24	Brr2	29	2109			2	2		7,16	7,35	4	7,35
			256	748		1			0,20			1	0,20
		Bud13/Cwc26	4	115		1			3,23			1	3,23
			100	213		1			1,03			1	1,03
		Cwc15	228	41		1			0,36			1	0,36
		Cwc2	93	152				1			6,93	1	6,93
		Cwc22	123	294				1			4,16	1	4,16
		Cwc27	63	171				2			6,12	2	6,12
		Prp2	232	870				1			1,61	1	1,61
			256	40				2			1,78	2	1,78
		Prp8	63	2284		3			2,13			3	2,13
			93	235		2	2	3	3,33	0,89	10,67	7	10,67
			517			1			1,40			1	1,40
			684			4	8	6	10,33	7,89	8,80	18	10,33
			697			3	1		3,79	1,77		4	3,79
			1926					8			6,65	8	6,65
			1931					1			5,32	1	5,32
			98	235	13,5	1			0,69			1	0,69
			1926	28,4				5			5,07	5	5,07
			1931	28,7			1	2		0,39	4,69	3	4,69
			123	235		3	3		1,02	0,42		6	1,02
			517			2	3		3,45	3,27		5	3,45
			681			1			0,84			1	0,84
			684			2	1	1	1,46	5,97	6,15	4	6,15
			697			5	2	2	14,16	8,26	6,08	9	14,16
			1435					3			10,51	3	10,51
			1926			3	1	8	5,55	3,54	7,20	12	7,20
			1931			2		4	3,57		10,66	6	10,66
		Rse1	182	1342				3			3,96	3	3,96
		Spp2	4	151		1			0,05			1	0,05
	Cwc27	Brr2	213	1504		1		1	0,94		2,00	2	2,00
			225	1529		1	3	1	0,47	5,11	7,64	5	7,64
		Bud31	78	35				2			4,58	2	4,58
		Cwc21	234	98			3			0,96		3	0,96
		Cwc22	295	176		5			1,56			5	1,56
		Cwc24	171	63				2			6,12	2	6,12
		Prp8	123	1713				6			11,34	6	11,34
	Ecm2	SmD1	216	140		1			2,77			1	2,77
		Brr2	356	82				1			2,03	1	2,03
		Bud31	230	40	39,1			1			9,34	1	9,34
		Clf1	116	59			1	2		0,56	2,98	3	2,98
			164	24				2			4,54	2	4,54
			230	668				1			2,55	1	2,55
		Cus1	203	429				1			6,37	1	6,37
		Cwc15	27	16		1			1,20			1	1,20
		Cwc2	116	236				2			5,12	2	5,12
			119	236	26,3			6			6,76	6	6,76
			157	236		3	3	4	4,36	1,44	6,79	10	6,79
			164	236		2	2	5	8,28	3,07	10,52	9	10,52
			167	236		1	1	12	15,55	3,07	12,74	14	15,55
			173	236	30,7	4	2	1	2,40	2,32	5,14	7	5,14
			188	152			2	4		5,56	11,32	6	11,32
			189	152		29	26	132	14,18	8,62	14,79	187	14,79
			230	2		1	2	11	1,27	4,41	6,91	14	6,91
			233	2		1	6		4,08	2,53		7	4,08
			247	236	18,7	2		2	2,21		6,84	4	6,84
		Prp17	188	207		4	2	1	3,14	2,72	4,89	7	4,89
			271			1			4,58			1	4,58
			189	207		1	2	2	0,21	1,97	7,29	5	7,29
			203	207		9	4	2	14,24	9,54	6,86	15	14,24
			274	207				2			3,11	2	3,11
			210			2		2	2,15		9,05	4	9,05
			271			1			0,00			1	0,00
							4			1,03		4	1,03

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				315		1		1	2,93		1,87	2	2,93
			277	207		1			0,15			1	0,15
		Snu114	188	111			1			0,82		1	0,82
			353	746		1			0,46			1	0,46
		Snu17/Ist3	188	123		1			0,08			1	0,08
		Syf2	138	148		1			0,08			1	0,08
	Hsh155	Brr2	35	82				1			1,49	1	1,49
		Bud13/Cwc26	473	120			3	1		2,42	2,23	4	2,42
				130				4			9,36	4	9,36
				136				1			2,03	1	2,03
			511	120			2			4,13		2	4,13
				130				1			13,86	1	13,86
			612	255	20,0	1	4	15	4,45	7,00	8,53	20	8,53
				256	16,7		2	5		0,53	5,10	7	5,10
		Cus1	237	102		1	1	1	3,85	0,69	2,42	3	3,85
			325	102			4	1		2,40	3,50	5	3,50
			722	223				4			2,31	4	2,31
				226				5			5,11	5	5,11
				236			13	42		8,32	7,90	55	8,32
		Prp11	722	11				1			2,24	1	2,24
		Prp2	237	2				1			5,79	1	5,79
		Prp8	35	906		7	6	27	2,85	4,13	5,79	40	5,79
				1007			1	5		1,53	5,55	6	5,55
			51	920				2			8,77	2	8,77
			104	1007				1			12,88	1	12,88
			137	956	15,3	12	5	10	9,03	2,25	12,45	27	12,45
			142	956	21,0	1	4	7	6,97	7,13	7,47	12	7,47
			151	956				2			8,87	2	8,87
			612	1588	30,5			1			6,21	1	6,21
				1589	31,6		6			6,78		6	6,78
			696	1588	9,7		2	1		3,56	6,15	3	6,15
		Rds3	276	29	43,7			3			5,61	3	5,61
			455	53	20,3	3			10,29			3	10,29
			500	53	13,5	4			8,27			4	8,27
			511	53	19,2	2		3	0,77		8,47	5	8,47
				56	19,3			3			9,22	3	9,22
		Rse1	511	221	22,6		2	1		0,52	2,40	3	2,40
				1269				4			6,95	4	6,95
			595	1269				5			15,04	5	15,04
			632	1269				2			4,56	2	4,56
			713	1269				4			7,49	4	7,49
				1342				1			5,21	1	5,21
		SmB	223	76		1			0,73			1	0,73
			325	186			2			3,04		2	3,04
		SmD1	158	128				2			6,46	2	6,46
				129				1			3,09	1	3,09
			736	128		1			3,09			1	3,09
		Snu17/Ist3	66	96		5	2	5	3,20	1,92	3,46	12	3,46
			104	96				2			4,99	2	4,99
			410	103		14			15,45			14	15,45
			455	103	17,8	6			12,69			6	12,69
			500	10		2			14,08			2	14,08
		Ysf3	932	4			2			0,68		2	0,68
				12	12,7		3			3,56		3	3,56
	Hsh49	Cus1	204	102				1			2,65	1	2,65
		Isy1	82	87				1			1,16	1	1,16
		Msl1	130	2			1	1		2,16	2,53	2	2,53
		Prp11	42	48		1		4	0,96		2,59	5	2,59
			101	103				2			2,47	2	2,47
		Prp21					2			1,53		2	1,53
		Prp9	39	462		1		1	1,39		1,59	2	1,59
			101	429				1			2,02	1	2,02
			147	371				1			2,10	1	2,10
			204	468		2	4	6	12,40	3,63	4,81	12	12,40
				475			1	1		0,18	2,54	2	2,54
			208	468		2	5	6	3,70	4,70	5,83	13	5,83
				475			3	5		0,70	3,61	8	3,61
				492		1		13	0,15		7,01	14	7,01
		Rse1	39	1176		4	2	8	5,21	0,44	3,10	14	5,21
		Cef1	42	294				1			1,49	1	1,49
	Isy1	Clf1	104	529		1			3,23			1	3,23
		Cus1	59	41		1			0,03			1	0,03
				48				1			3,17	1	3,17
			157	317				1			1,98	1	1,98
		Cwc2	7	152		1			3,83			1	3,83
			27	152				1			2,53	1	2,53
			40	152		1			3,32			1	3,32
			42	152			1	1		1,48	2,56	2	2,56
		Hsh49	87	82				1			1,16	1	1,16
		Prp11	27	103				1			4,44	1	4,44
				126				2			5,64	2	5,64
				192				1			2,82	1	2,82
			56	192				1			1,53	1	1,53

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
		Prp21				1			4,84			1	4,84
		SmB	106	100		1			1,19			1	1,19
		SmG	104	8				1			2,89	1	2,89
		Syf1	7	259				2			5,83	2	5,83
				328		1	3	6	10,49	5,14	9,35	10	10,49
				424		1	2	5	1,18	5,11	7,02	8	7,02
			27	328		1			2,03			1	2,03
			40	328		2	3	7	2,37	2,44	4,75	12	4,75
			139	146		2			5,57			2	5,57
			143	146		2	4	1	5,24	4,45	4,06	7	5,24
			157	220			1	4		0,70	9,62	5	9,62
				249				1			3,79	1	3,79
			161	220		3	7	9	2,63	2,37	4,94	19	4,94
			171	220		9	6	1	4,61	5,04	2,46	16	5,04
		Syf2	7	26		1	4	3	1,75	2,47	4,26	8	4,26
			27	26			1	4		1,36	4,12	5	4,12
			42	173		1	2		5,98	1,83		3	5,98
		Yju2/Cwc16	103	63			1			0,27		1	0,27
	Lea1	Cef1	205	359		1			0,18			1	0,18
		Msl1	215	2				1			3,65	1	3,65
		Prp21					1			0,27		1	0,27
		Prp9	2	140				1			7,02	1	7,02
			194	115				1			1,75	1	1,75
			215	107				1			1,72	1	1,72
				115		3	5	8	3,15	2,06	11,71	16	11,71
				121		1		2	3,07		3,26	3	3,26
			216	115				1			1,38	1	1,38
			232	121				1			1,81	1	1,81
		SmB	125	76			3	11		1,57	8,77	14	8,77
		Syf1	232	32			1	1		2,40	1,79	2	2,40
	Msl1	Cus1	2	102				2			6,19	2	6,19
				128		1		1	8,56		5,86	2	8,56
		Hsh49	2	130			1	1		2,16	2,53	2	2,53
		Lea1	2	215				1			3,65	1	3,65
		Prp9	2	115		1		6	12,81		10,88	7	12,81
				121				4			4,11	4	4,11
				124				8			5,13	8	5,13
		Rse1	2	1001		1			1,63			1	1,63
		SmB	2	105		2			1,64			2	1,64
				114				1			1,59	1	1,59
				124				1			1,92	1	1,92
				138				2			4,30	2	4,30
				186			1			0,03		1	0,03
		SmD3	2	85				1			4,79	1	4,79
		Cef1	94	305				2			3,90	2	3,90
		Clf1	121	451			2	2		3,86	6,69	4	6,69
		Cwc22	1	203				1			0,36	1	0,36
		Syf1	27	498		6		2	4,07		8,58	8	8,58
				558		2	2	2	1,41	1,40	5,11	6	5,11
		Prp2	6	820		1			0,39			1	0,39
		Prp45	88	242		1		1	0,50		5,76	2	5,76
			90	242		2	8	1	2,44	5,39	2,84	11	5,39
		Syf1	153	372				1			1,13	1	1,13
		Cef1	36	22			1			1,92		1	1,92
		Cus1	11	226				3			4,34	3	4,34
			28	223				4			5,60	4	5,60
				226				2			5,53	2	5,53
			36	226			4			2,17		4	2,17
			48	223				2			0,99	2	0,99
				226				4			5,15	4	5,15
			60	223				2			3,26	2	3,26
				226			1	2		3,83	3,98	3	3,98
			192	223				1			2,44	1	2,44
				226				1			5,00	1	5,00
		Cwc22	28	548				1			1,68	1	1,68
		Hsh155	11	722				1			2,24	1	2,24
		Hsh49	48	42		1		4	0,96		2,59	5	2,59
			103	101				2			2,47	2	2,47
		Isy1	103	27				1			4,44	1	4,44
			126	27				2			5,64	2	5,64
			192	27				1			2,82	1	2,82
				56				1			1,53	1	1,53
		Prp2	121	43				1			8,50	1	8,50
		Prp21				11	26	47	4,49	8,14	11,80	84	11,80
		Prp8	11	956				1			7,10	1	7,10
		Prp9	11	58				3			6,61	3	6,61
				371				1			12,95	1	12,95
			173	58				9			11,12	9	11,12
				61				1			2,35	1	2,35
			175	61			3			1,26		3	1,26
		SmB	103	138				1			2,54	1	2,54
				145				1			1,21	1	1,21
			126	186				1			2,38	1	2,38

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total	Best
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	spectral count	Score <sub>max</sub>
		Syf1	192	424		1		4	2,48		7,93	5	7,93
		Syf2	192	26		2	3	5	3,34	5,17	6,42	10	6,42
	Prp17	Brr2	153	1414		1			0,97			1	0,97
		Cwc2	207	152		4	2	1	9,51	5,81	1,66	7	9,51
		Ecm2	207	188		4	2	1	3,14	2,72	4,89	7	4,89
				189		1	2	2	0,21	1,97	7,29	5	7,29
				203				2			3,11	2	3,11
				274		2		2	2,15		9,05	4	9,05
				277		1			0,15			1	0,15
			210	274		1			0,00			1	0,00
			271	188		1			4,58			1	4,58
				189		9	4	2	14,24	9,54	6,86	15	14,24
				274			4			1,03		4	1,03
			315	274		1		1	2,93		1,87	2	2,93
		Prp19	27	170				1			2,99	1	2,99
		Prp8	404	670		1			0,48			1	0,48
	Prp19	Cef1	107	496		3	3	16	8,53	2,42	8,46	22	8,53
			108	444		5		13	4,63		6,83	18	6,83
				496		3	5	14	1,87	7,01	5,71	22	7,01
				500		21	23	220	14,32	14,03	16,95	264	16,95
				558			1			7,46		1	7,46
			130	454		2	2	2	3,58	9,32	5,03	6	9,32
			135	454			1			2,63		1	2,63
		Cus1	272	357			2			1,11		2	1,11
		Cwc2	107	286				2			3,09	2	3,09
			108	286		3	3	31	4,55	1,57	11,28	37	11,28
				320		4	4	7	7,67	6,27	8,30	15	8,30
		Cwc21	404	98				1			2,36	1	2,36
		Prp17	170	27				1			2,99	1	2,99
		Prp21				1			0,08			1	0,08
		Prp8	107	1372		2			1,22			2	1,22
				1378		1			1,38			1	1,38
			108	1209				1			0,41	1	0,41
		SmB	378	55		1			3,42			1	3,42
				60		2	3	1	4,83	2,16	0,94	6	4,83
		SmG	130	24		1			0,98			1	0,98
		Snt309	107	25		12	3	8	10,81	8,62	13,48	23	13,48
				32		2		12	4,50		13,91	14	13,91
				46		1	4		1,70	10,80		5	10,80
				48		6	3	11	6,46	1,19	8,82	20	8,82
				67		7	4	10	14,65	3,43	9,05	21	14,65
				72			1			0,21		1	0,21
			108	25		15	9	9	14,90	10,62	17,25	33	17,25
				46		9	6	9	9,75	5,41	5,51	24	9,75
				48				1			12,06	1	12,06
			120	25		4	2	4	5,76	4,11	7,08	10	7,08
			130	26		1	1	1	0,24	2,43	6,54	3	6,54
			135	11		1			1,31			1	1,31
			139	26		2	2		4,21	3,59		4	4,21
	Prp2	Brr2	2	1623				1			2,31	1	2,31
				2070				3			8,79	3	8,79
				2109				10			10,91	10	10,91
				2116				1			7,51	1	7,51
				2121				35			16,89	35	16,89
			45	1437				1			5,60	1	5,60
			211	2				1			6,22	1	6,22
				28				2			7,29	2	7,29
		Bud13/Cwc26	2	181				1			6,85	1	6,85
			567	115				1			0,09	1	0,09
		Cef1	732	263			1			5,68		1	5,68
		Clf1	10	425				1			2,46	1	2,46
		Cus1	2	102				1			6,10	1	6,10
		Cwc21	756	48				1			10,75	1	10,75
		Cwc22	137	520				1			2,20	1	2,20
		Cwc24	40	256				2			1,78	2	1,78
			870	232				1			1,61	1	1,61
		Hsh155	2	237				1			5,79	1	5,79
		Pml1	820	6		1			0,39			1	0,39
		Prp11	43	121				1			8,50	1	8,50
		Prp45	2	274				1			5,90	1	5,90
			60	274				1			6,27	1	6,27
			101	274		1		2	1,35		9,86	3	9,86
			102	265				1			10,38	1	10,38
				274		2		2	3,95		11,12	4	11,12
			113	265				1			3,13	1	3,13
				274				2			6,24	2	6,24
			120	274		2		2	0,95		7,59	4	7,59
			128	274		1			0,80			1	0,80
			130	274				1			2,15	1	2,15
			133	274				5			6,22	5	6,22
		Prp8	40	672				1			1,38	1	1,38
			467	1903	84,6			2			3,45	2	3,45
			560	1903	82,5			2			3,48	2	3,48



Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total	Best
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	spectral count	Score <sub>max</sub>
			756	519	155,0			1			5,49	1	5,49
			820	817					2,95			1	2,95
		Prp9	83	235		1				0,94		1	0,94
		Rds3	10	42				3			3,45	3	3,45
		SmD1	756	128				1			2,24	1	2,24
		SmE	14	1		1			0,82			1	0,82
		Snu114	40	115				1			2,34	1	2,34
			632	955	149,8			2			7,04	2	7,04
			756	749	208,0			1			1,75	1	1,75
				955	160,1			5			5,61	5	5,61
			763	955	147,7			1			5,73	1	5,73
			851	955	135,7			3			6,41	3	6,41
		Spp2	336	82		2		5	1,67		7,16	7	7,16
				83		1		4	2,28		2,76	5	2,76
			461	168		4		6	3,34		5,84	10	5,84
				181				1			2,80	1	2,80
			632	82				1			3,53	1	3,53
				83		2		2	7,68		7,77	4	7,77
			640	83		1			4,92			1	4,92
			750	82		1		1	1,21		3,93	2	3,93
			756	82		1			1,91			1	1,91
				83		1		2	3,40		2,90	3	3,40
				95				1			5,34	1	5,34
			840	154		1			2,83			1	2,83
		Yju2/Cwc16	732	29		2			0,44			2	0,44
		Cus1	261	53			1			0,13		1	0,13
		Hsh49	175	147			2			1,53		2	1,53
		Isy1	189	7		1			4,84			1	4,84
		Lea1	175	194			1			0,27		1	0,27
		Prp11	68	175				1			2,66	1	2,66
			177	175			4			3,18		4	3,18
			183	121			7	1		5,85	6,15	8	6,15
			199	126			1	4		1,72	3,13	5	3,13
			205	192				1			5,64	1	5,64
			234	139		3	6	4	1,71	8,14	11,74	13	11,74
			240	11				3			8,58	3	8,58
				130				1			2,15	1	2,15
				139		4	4	12	4,49	5,55	11,80	20	11,80
			247	11				1			5,42	1	5,42
				192				1			2,90	1	2,90
			254	11				3			2,84	3	2,84
				28				1			2,39	1	2,39
				126		1			0,70			1	0,70
				192		2	2	7	1,31	1,07	6,91	11	6,91
				194				1			2,16	1	2,16
			256	28				1			2,85	1	2,85
				36				1			2,56	1	2,56
				192		1	1	2	0,02	2,23	4,18	4	4,18
			261	28				1			2,39	1	2,39
				192				1		1,00	2,27	2	2,27
		Prp19	177	18		1			0,08			1	0,08
		Prp45	175	237		1			0,00			1	0,00
		Prp8	247	777				1			2,63	1	2,63
		Prp9	20	47				3		1,48		3	1,48
				58				5		4,61	5,46	7	5,46
			29	58				2			3,99	1	3,99
			41	58				1			5,63	1	5,63
			68	47				13			2,14	32	2,37
				58		5	12	81	4,47	2,84	10,51	98	10,51
				61				2		2,58	5,34	5	5,34
			105	107		7	2	7	2,65	1,77	6,82	16	6,82
				115		6	13	14	10,69	3,91	4,70	33	10,69
			116	107				1			7,28	1	7,28
				121		1	1		0,68	1,32		2	1,32
			143	107		3	7	13	18,44	12,85	6,21	23	18,44
			175	371		1	7	4	0,98	7,82	10,71	12	10,71
		SmB	68	194				1			1,62	1	1,62
			175	124				1		1,50		1	1,50
		Syf1	240	424				2			4,63	2	4,63
			247	424				1			4,45	1	4,45
			254	424		3		5	3,40		6,01	8	6,01
			256	424		1		4	1,06		4,15	5	4,15
		Syf2	247	26				1			4,02	1	4,02
			254	26				1		3,40		1	3,40
		Bud13/Cwc26	352	146		1		1	2,53		2,42	2	2,53
			367	136				1			5,55	1	5,55
		Cwc15	71	41		1		1	4,39		6,62	2	6,62
				43				1		1,32		1	1,32
		Cwc22	130	505		1			2,06			1	2,06
			265	520		1	1	7	5,13	4,37	11,97	9	11,97
				530		4	4	3	6,04	6,92	7,54	11	7,54
			274	505		5	1	1	6,23	3,75	4,11	7	6,23
				520		18	11	17	11,78	9,46	14,67	46	14,67

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				530		16	7	14	8,37	3,25	7,13	37	8,37
			287	520		4	1	7	2,44	0,74	3,90	12	3,90
				530		4	8	14	5,49	4,49	7,60	26	7,60
		Pml1	242	88		1		1	0,50		5,76	2	5,76
				90		2	8	1	2,44	5,39	2,84	11	5,39
		Prp2	265	102				1			10,38	1	10,38
				113				1			3,13	1	3,13
			274	2				1			5,90	1	5,90
				60				1			6,27	1	6,27
				101		1		2	1,35		9,86	3	9,86
				102		2		2	3,95		11,12	4	11,12
				113				2			6,24	2	6,24
				120		2		2	0,95		7,59	4	7,59
				128		1			0,80			1	0,80
				130				1			2,15	1	2,15
				133				5			6,22	5	6,22
		Prp21				1			0,00			1	0,00
		Prp46	60	319	15,4	2	1	5	12,63	4,95	10,91	8	12,63
			81	249	15,0	1		1	1,05		3,50	2	3,50
		Prp8	129	159	9,6	1			0,83			1	0,83
			242	858		1			2,89			1	2,89
			274	810		1			1,69			1	1,69
			352	2097				1			2,91	1	2,91
			367	1910				3			6,52	3	6,52
				2016		2		9	5,39		10,16	11	10,16
				2122				6			11,41	6	11,41
			373	2016				4			6,17	4	6,17
		SmB	60	138				4			5,94	4	5,94
				186				2			5,37	2	5,37
			71	131			2			1,55		2	1,55
				132		1			1,09			1	1,09
				138		2	4	5	7,44	5,86	9,06	11	9,06
				145				1			7,76	1	7,76
		Snu17/Ist3	287	143				1			2,17	1	2,17
		Syf2	36	142				1			1,02	1	1,02
				145		15	10	27	13,10	3,00	5,38	52	13,10
				151		4	5	10	12,24	4,37	18,80	19	18,80
			71	1				2			0,22	2	0,22
		Yju2/Cwc16	129	1		1			0,59			1	0,59
		Clf1	67	273			1	3		4,33	12,55	4	12,55
			87	273				3			9,49	3	9,49
			88	273		1		1	5,98		10,44	2	10,44
		Cwc2	56	286		1			0,65			1	0,65
		Prp45	249	81	15,0	1		1	1,05		3,50	2	3,50
			319	60	15,4	2	1	5	12,63	4,95	10,91	8	12,63
		SmB	319	138				1			3,70	1	3,70
				186				1			4,93	1	4,93
		Snu114	173	81				2			1,64	2	1,64
		Syf2	56	145				1			2,52	1	2,52
			67	145				1			3,17	1	3,17
			87	145		1		3	7,44		6,64	4	7,44
			88	145		2			3,30			2	3,30
		Prp8		1903				2			9,54	2	9,54
				25		1			1,15			1	1,15
				31		1			0,32			1	0,32
			2016	50				1			7,68	1	7,68
				74				3			8,59	3	8,59
			2108	1055				2			5,65	2	5,65
			2149	1055	17,5			1			5,78	1	5,78
			2154	91				1			8,47	1	8,47
				1055	16,4			6		5,43	5,02	9	5,43
			2167	304				1			6,73	1	6,73
			2187	304				1			6,89	1	6,89
			2213	304				2			5,60	2	5,60
			2284	91				1			1,15	1	1,15
		Bud13/Cwc26	1589	255	33,4			2			7,71	2	7,71
			1903	35		3			1,92			3	1,92
				41		2			2,22			2	2,22
			1926	181				2			4,40	2	4,40
			2016	53				1			8,14	1	8,14
				61				1			2,19	1	2,19
				120			1			0,68		1	0,68
			2187	15				2			11,00	2	11,00
				17		2			3,68			2	3,68
				68				2			4,23	2	4,23
			2217	2		1			0,63			1	0,63
			2219	2		1		1	5,15		1,47	2	5,15
		Cef1	98	166		1			0,62			1	0,62
			1910	294		3		1	2,80		1,46	4	2,80
			2192	496		1			0,46			1	0,46
		Cwc15	1205	172			1			0,70		1	0,70
			1242	151				1			5,95	1	5,95
			1310	172		3			3,49			3	3,49

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
Prp9		Cwc21	351	12				1			9,11	1	9,11
			1205	12		3		2	3,97		4,62	5	4,62
		Cwc22	121	505		4			2,82			4	2,82
			1435	294	10,3			2			13,19	2	13,19
		Cwc24	235	93		2	2	3	3,33	0,89	10,67	7	10,67
				98	13,5	1			0,69			1	0,69
				123		3	3		1,02	0,42		6	1,02
			517	93		1			1,40			1	1,40
				123		2	3		3,45	3,27		5	3,45
			681	123		1			0,84			1	0,84
			684	93		4	8	6	10,33	7,89	8,80	18	10,33
				123		2	1	1	1,46	5,97	6,15	4	6,15
			697	93		3	1		3,79	1,77		4	3,79
				123		5	2	2	14,16	8,26	6,08	9	14,16
			1435	123				3			10,51	3	10,51
			1926	93				8			6,65	8	6,65
				98	28,4			5			5,07	5	5,07
				123		3	1	8	5,55	3,54	7,20	12	7,20
			1931	93				1			5,32	1	5,32
				98	28,7			2		0,39	4,69	3	4,69
				123		2		4	3,57		10,66	6	10,66
			2284	63		3			2,13			3	2,13
		Cwc27	1713	123				6			11,34	6	11,34
		Hsh155	906	35		7	6	27	2,85	4,13	5,79	40	5,79
			920	51				2			8,77	2	8,77
			956	137	15,3	12	5	10	9,03	2,25	12,45	27	12,45
				142	21,0	1	4	7	6,97	7,13	7,47	12	7,47
				151				2			8,87	2	8,87
			1007	35			1	5		1,53	5,55	6	5,55
				104				1			12,88	1	12,88
			1588	612	30,5			1			6,21	1	6,21
				696	9,7		2	1		3,56	6,15	3	6,15
			1589	612	31,6		6			6,78		6	6,78
		Prp11	956	11				1			7,10	1	7,10
		Prp17	670	404		1			0,48			1	0,48
		Prp19	1209	108				1			0,41	1	0,41
			1372	107		2			1,22			2	1,22
			1378	107		1			1,38			1	1,38
		Prp2	519	756	155,0			1			5,49	1	5,49
			672	40				1			1,38	1	1,38
			817	820		1			2,95			1	2,95
			1903	467	84,6			2			3,45	2	3,45
				560	82,5			2			3,48	2	3,48
		Prp21						1			2,63	1	2,63
		Prp45	159	129	9,6	1			0,83			1	0,83
			810	274		1			1,69			1	1,69
			858	242		1			2,89			1	2,89
			1910	367				3			6,52	3	6,52
			2016	367		2		9	5,39		10,16	11	10,16
				373				4			6,17	4	6,17
		2097	352				1			2,91	1	2,91	
		2122	367				6			11,41	6	11,41	
	Rse1	2080	1269				1			8,87	1	8,87	
		2097	1269				1			7,64	1	7,64	
	SmB	90	138				1			3,21	1	3,21	
			186				1			10,12	1	10,12	
		98	138				1			8,45	1	8,45	
			186			2	1		4,22	3,66	3	4,22	
		103	138				1			6,58	1	6,58	
		159	186				1			9,02	1	9,02	
		166	186				3			6,94	3	6,94	
		586	186				2			6,62	2	6,62	
		743	145				1			2,20	1	2,20	
		810	186			1	3		2,09	5,94	4	5,94	
			194				1			3,15	1	3,15	
			140				1			3,18	1	3,18	
	SmD1	98	140				1			0,11	1	0,11	
	SmG	846	13								1		
	Snt309	490	72				1			0,43	1	0,43	
	Snu114	325	173	13,1	8	23	13	8,22	8,13	7,04	44	8,22	
		333	173	18,4	4	9	4	7,21	8,32	5,39	17	8,32	
		334	173	17,8		1	3		6,62	8,38	4	8,38	
		810	59			1	1		1,49	3,17	2	3,17	
			60			4	1		6,13	4,46	5	6,13	
		1209	669	19,6			1			0,95	1	0,95	
		1299	955	24,0		1			0,87		1	0,87	
	Spp2	835	14		1			0,32			1	0,32	
	Syf1	300	2			1			0,08		1	0,08	
	Brr2	519	152			1			0,14		1	0,14	
	Cus1	466	128		1	2	2	3,23	1,24	2,61	5	3,23	
		468	128			1	1		0,38	5,52	2	5,52	
		492	128				1			3,31	1	3,31	
	Hsh49	371	147				1			2,10	1	2,10	
		429	101				1			2,02	1	2,02	

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			462	39		1		1	1,39		1,59	2	1,59
			468	204		2	4	6	12,40	3,63	4,81	12	12,40
				208		2	5	6	3,70	4,70	5,83	13	5,83
			475	204			1	1		0,18	2,54	2	2,54
				208			3	5		0,70	3,61	8	3,61
			492	208		1		13	0,15		7,01	14	7,01
		Lea1	107	215				1			1,72	1	1,72
			115	194				1			1,75	1	1,75
				215		3	5	8	3,15	2,06	11,71	16	11,71
				216				1			1,38	1	1,38
			121	215		1		2	3,07		3,26	3	3,26
				232				1			1,81	1	1,81
			140	2				1			7,02	1	7,02
		Msl1	115	2		1		6	12,81		10,88	7	12,81
			121	2				4			4,11	4	4,11
			124	2				8			5,13	8	5,13
		Prp11	58	11				3			6,61	3	6,61
				173				9			11,12	9	11,12
			61	173				1			2,35	1	2,35
				175			3			1,26		3	1,26
			371	11				1			12,95	1	12,95
		Prp2	235	83			1			0,94		1	0,94
		Prp21				23	72	139	18,44	12,85	10,71	234	18,44
		Rse1	462	1176		1	5	3	0,71	6,80	8,97	9	8,97
			492	1001				3			6,37	3	6,37
				1184				4			5,39	4	5,39
		SmB	235	65		1		2	1,09		2,35	3	2,35
				68				1			4,54	1	4,54
			238	65				1			2,58	1	2,58
				68				2			5,17	2	5,17
			371	138				3			7,73	3	7,73
				186				4			12,93	4	12,93
			466	117				1			2,87	1	2,87
			468	117			2			1,78		2	1,78
		SmD1	360	128				1			2,35	1	2,35
			371	128			1	5		0,66	4,46	6	4,46
				129				1			2,25	1	2,25
				140				4			4,98	4	4,98
		Yju2/Cwc16	371	68				1			2,32	1	2,32
		Clf1	42	640		1	1	3	3,50	0,50	5,76	5	5,76
		Hsh155	29	276	43,7			3			5,61	3	5,61
			53	455	20,3	3			10,29			3	10,29
				500	13,5	4			8,27			4	8,27
				511	19,2	2		3	0,77		8,47	5	8,47
			56	511	19,3			3			9,22	3	9,22
		Prp2	42	10				3			3,45	3	3,45
		Ysf3	13	9	16,6		1			0,14		1	0,14
		Rse1	Brr2	556	304			2			6,29	2	6,29
					414			7			8,66	7	8,66
					417			1			3,42	1	3,42
					967	83,3		1			6,22	1	6,22
			1269	758				1			1,69	1	1,69
				795				1			4,89	1	4,89
		Bud13/Cwc26	1269	115				1			5,69	1	5,69
		Cus1	1149	347		1	2		4,32	4,68		3	4,68
			1342	245		2	11	19	1,01	7,20	11,47	32	11,47
				246		5	19	8	6,41	12,16	11,56	32	12,16
		Cwc15	557	43				2			3,38	2	3,38
		Cwc24	1342	182				3			3,96	3	3,96
		Hsh155	221	511	22,6		2	1		0,52	2,40	3	2,40
			1269	511				4			6,95	4	6,95
				595				5			15,04	5	15,04
				632				2			4,56	2	4,56
				713				4			7,49	4	7,49
			1342	713				1			5,21	1	5,21
		Hsh49	1176	39		4	2	8	5,21	0,44	3,10	14	5,21
		Msl1	1001	2		1			1,63			1	1,63
		Prp8	1269	2080				1			8,87	1	8,87
				2097				1			7,64	1	7,64
		Prp9	1001	492				3			6,37	3	6,37
			1176	462		1	5	3	0,71	6,80	8,97	9	8,97
			1184	492				4			5,39	4	5,39
		Snt309	1057	48		1			1,68			1	1,68
		Spp2	374	38				6			12,26	6	12,26
				83				1			4,28	1	4,28
		SmB	Cef1	76	187		1		0,95			1	0,95
			Cus1	117	128		1		1,46		4,59	2	4,59
				138	83			2			4,68	2	4,68
				86				1			1,97	1	1,97
				95			1	2		0,44	8,99	3	8,99
				102				4			8,02	4	8,02
			145	83				1			2,97	1	2,97
			186	79				1			3,62	1	3,62

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				83				1			4,86	1	4,86
				102				1			7,29	1	7,29
		Hsh155	76	223		1			0,73			1	0,73
			186	325			2			3,04		2	3,04
		Isy1	100	106		1			1,19			1	1,19
		Lea1	76	125			3	11		1,57	8,77	14	8,77
		Msl1	105	2		2			1,64			2	1,64
			114	2				1			1,59	1	1,59
			124	2				1			1,92	1	1,92
			138	2				2			4,30	2	4,30
			186	2			1			0,03		1	0,03
		Prp11	138	103				1			2,54	1	2,54
			145	103				1			1,21	1	1,21
			186	126				1			2,38	1	2,38
		Prp19	55	378		1			3,42			1	3,42
			60	378		2	3	1	4,83	2,16	0,94	6	4,83
		Prp21					1	1		1,50	1,62	2	1,62
		Prp45	131	71			2			1,55		2	1,55
			132	71		1			1,09			1	1,09
			138	60				4			5,94	4	5,94
				71		2	4	5	7,44	5,86		11	9,06
			145	71				1			7,76	1	7,76
			186	60				2			5,37	2	5,37
		Prp46	138	319				1			3,70	1	3,70
			186	319				1			4,93	1	4,93
		Prp8	138	90				1			3,21	1	3,21
				98				1			8,45	1	8,45
				103				1			6,58	1	6,58
			145	743				1			2,20	1	2,20
			186	90				1			10,12	1	10,12
				98			2	1		4,22	3,66	3	4,22
				159				1			9,02	1	9,02
				166				3			6,94	3	6,94
				586				2			6,62	2	6,62
			810	810			1	3		2,09	5,94	4	5,94
			194	810				1			3,15	1	3,15
		Prp9	65	235		1		2	1,09		2,35	3	2,35
				238				1			2,58	1	2,58
			68	235				1			4,54	1	4,54
				238				2			5,17	2	5,17
			117	466				1			2,87	1	2,87
				468			2			1,78		2	1,78
			138	371				3			7,73	3	7,73
			186	371				4			12,93	4	12,93
		SmD1	138	128				2			3,71	2	3,71
			186	129				1			2,24	1	2,24
		SmD2	65	82				10			3,89	10	3,89
		SmD3	19	79	15,3			1			2,33	1	2,33
			39	2				1			4,88	1	4,88
			105	2				2			6,85	2	6,85
				79			1	1		0,30	1,36	2	1,36
				85		2	5	3	2,36	7,58	7,24	10	7,58
				86			5	8		3,30	4,46	13	4,46
		Snu114	76	60			1			1,86		1	1,86
			105	99				2			7,28	2	7,28
				159			4	5		4,15	3,67	9	4,15
			186	617				1			4,88	1	4,88
		Syf2	117	14				1			2,79	1	2,79
		Yju2/Cwc16	105	2				1			1,39	1	1,39
		Cus1	128	83				1			4,47	1	4,47
				102				3			8,62	3	8,62
		Cwc27	140	216		1			2,77			1	2,77
		Hsh155	128	158				2			6,46	2	6,46
				736		1			3,09			1	3,09
			129	158				1			3,09	1	3,09
		Prp2	128	756				1			2,24	1	2,24
		Prp8	140	98				1			3,18	1	3,18
		Prp9	128	360				1			2,35	1	2,35
				371			1	5		0,66	4,46	6	4,46
			129	371				1			2,25	1	2,25
			140	371				4			4,98	4	4,98
		SmB	128	138				2			3,71	2	3,71
			129	186				1			2,24	1	2,24
		SmD2	54	82			1	9		0,29	4,32	10	4,32
			111	59				3			5,09	3	5,09
			128	27				4			4,84	4	4,84
		SmD3	128	2				1			2,95	1	2,95
		Snu114	128	356		1	1	1	3,03	0,60	1,77	3	3,03
				397		1	3	3	6,12	5,66	9,82	7	9,82
			129	397				1			4,30	1	4,30
			140	356		2		3	1,44			2	1,44
				397			4	3		3,66	5,35	7	5,35
		Yju2/Cwc16	128	74				1			2,94	1	2,94

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total	Best
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	spectral count	Score <sub>max</sub>
			140	74				1			1,97	1	1,97
	SmD2	Brr2	59	1904								1	2,76
		SmB	82	65			1			2,76		10	3,89
		SmD1	27	128				10				10	4,84
			59	111				4				4	4,84
			82	54				3				3	5,09
		Spp2	80	3			1	9		0,29		10	4,32
	SmD3	Cef1	85	321		1	1			0,21		1	0,21
		Cus1	2	79								1	0,46
				83				17		0,46		17	9,62
				86				4				4	9,14
				102				2				2	4,62
				85	86			1				1	3,26
				86	83			2				2	6,19
		Msl1	85	2				1				1	4,79
		SmB	2	39				1				1	4,88
				105				2				2	6,85
			79	19	15,3			1				1	2,33
				105				1				2	1,36
			85	105		2	1	3		0,30		10	7,58
			86	105			5	8		2,36		13	4,46
		SmD1	2	128				1				1	2,95
		SmG	32	9	16,5			8			4,92	8	4,92
		Snu114	32	558	16,1			2				2	5,84
			85	159	13,6	10	15	96	16,46	6,72	9,09	121	16,46
			86	159		1	4	11	4,04	4,51	6,97	16	6,97
	SmE	Cus1	6	39		4	2	10	2,02	2,30	4,35	16	4,35
				48		1	1	16	0,86	0,64	5,50	18	5,50
				53				1			1,87	1	1,87
				58				1			2,86	1	2,86
				79		2			3,36			2	3,36
		Prp2	1	14		1			0,82			1	0,82
		SmG	6	8		2	7	30	15,35	6,68	11,58	39	15,35
				13				2			2,85	2	2,85
				14		1	1	1	0,94	0,01	1,72	3	1,72
	SmF	Cus1	20	58			2			2,80		2	2,80
	SmG	Clf1	1	668		1			0,08			1	0,08
		Cus1	2	79			2	13		3,68	9,91	15	9,91
				83				1			3,09	1	3,09
			8	2		2			1,18			2	1,18
				79		1			3,97			1	3,97
				83			1	1		1,39	2,50	2	2,50
			24	16			2	3		2,89	8,83	5	8,83
		Cwc2	8	310			2			1,04		2	1,04
		Isy1	8	104				1			2,89	1	2,89
		Prp19	24	130		1			0,98			1	0,98
		Prp8	13	846		1			0,11			1	0,11
		SmD3	9	32	16,5		8			4,92		8	4,92
		SmE	8	6		2	7	30	15,35	6,68	11,58	39	15,35
			13	6				2		2,85		2	2,85
			14	6		1	1	1	0,94	0,01	1,72	3	1,72
	Snt309	Brr2	94	748						0,55		1	0,55
		Cef1	26	187				1			1,36	1	1,36
		Clf1	94	670				1			4,05	1	4,05
		Prp19	11	135		1			1,31			1	1,31
			25	107		12	3	8	10,81	8,62	13,48	23	13,48
				108		15	9	9	14,90	10,62	17,25	33	17,25
				120		4	2	4	5,76	4,11	7,08	10	7,08
			26	130		1	1	1	0,24	2,43	6,54	3	6,54
				139		2	2		4,21	3,59		4	4,21
			32	107		2		12	4,50		13,91	14	13,91
			46	107		1	4		1,70	10,80		5	10,80
				108		9	6	9	9,75	5,41	5,51	24	9,75
			48	107		6	3	11	6,46	1,19	8,82	20	8,82
				108				1			12,06	1	12,06
			67	107		7	4	10	14,65	3,43	9,05	21	14,65
			72	107				1		0,21		1	0,21
		Prp8	72	490				1			0,43	1	0,43
		Rse1	48	1057		1			1,68			1	1,68
	Snu114	Brr2	955	2				1			5,16	1	5,16
				7				1			4,08	1	4,08
		Clf1	627	670				1			0,28	1	0,28
		Cwc15	59	145		1			3,47			1	3,47
				150				2			3,96	2	3,96
				151				1			2,82	1	2,82
			60	140		1			5,78			1	5,78
				145		1	2	1	0,63	4,30	5,72	4	5,72
				150		4	1		4,12	0,67		5	4,12
				151		2	4	3	9,75	7,80	8,57	9	9,75
			72	150		1			2,10			1	2,10
				151				4			13,68	4	13,68
			81	150				1			1,79	1	1,79
				151				14			12,86	14	12,86

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>C<sub>max</sub></sub>			Total spectral count	Best Score <sub>C<sub>max</sub></sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
		Cwc21	955	12		6	2	6	9,33	5,91	12,44	14	12,44
		Cwc22	369	176	13,8	5			4,02			5	4,02
		Ecm2	111	188			1			0,82		1	0,82
			746	353		1			0,46			1	0,46
		Prp2	115	40				1			2,34	1	2,34
			749	756	208,0			1			1,75	1	1,75
			955	632	149,8			2			7,04	2	7,04
				756	160,1			5			5,61	5	5,61
				763	147,7			1			5,73	1	5,73
				851	135,7			3			6,41	3	6,41
		Prp46	81	173				2			1,64	2	1,64
		Prp8	59	810			1	1		1,49	3,17	2	3,17
			60	810			4	1		6,13	4,46	5	6,13
			173	325	13,1	8	23	13	8,22	8,13	7,04	44	8,22
				333	18,4	4	9	4	7,21	8,32	5,39	17	8,32
				334	17,8		1	3		6,62	8,38	4	8,38
			669	1209	19,6			1			0,95	1	0,95
			955	1299	24,0		1			0,87		1	0,87
		SmB	60	76			1			1,86		1	1,86
			99	105				2			7,28	2	7,28
			159	105			4	5		4,15	3,67	9	4,15
			617	186				1			4,88	1	4,88
		SmD1	356	128		1	1	1	3,03	0,60	1,77	3	3,03
				140		2			1,44			2	1,44
			397	128		1	3	3	6,12	5,66	9,82	7	9,82
				129				1			4,30	1	4,30
				140			4	3		3,66	5,35	7	5,35
		SmD3	159	85	13,6	10	15	96	16,46	6,72	9,09	121	16,46
				86		1	4	11	4,04	4,51	6,97	16	6,97
			558	32	16,1			2			5,84	2	5,84
	Snu17/Ist3	Bud13/Cwc26	10	244			2			4,43		2	4,43
			133	169			2	1		4,84	2,06	3	4,84
				181			1	3		3,77	5,55	4	5,55
				213		3	5	3	6,15	6,66	6,20	11	6,66
			138	169		4	7	4	3,39	6,93	8,23	15	8,23
				179			4	6		4,88	14,63	10	14,63
				180				2			6,88	2	6,88
				181		12	17	48	10,00	6,95	7,94	77	10,00
				201		1	4	16	4,09	3,27	9,39	21	9,39
				206		3		4	11,35		7,72	7	11,35
				213		5	6	5	8,35	7,00	9,39	16	9,39
			143	179		1	2	4	2,73	1,41	9,46	7	9,46
				181			2	2		0,52	1,85	4	1,85
				201				6			5,09	6	5,09
				206		1			0,97			1	0,97
				213		1			0,90			1	0,90
		Cwc22	138	520				1			4,91	1	4,91
			143	530		1			2,93			1	2,93
		Ecm2	123	188		1			0,08			1	0,08
		Hsh155	10	500		2			14,08			2	14,08
			96	66		5	2	5	3,20	1,92	3,46	12	3,46
				104				2			4,99	2	4,99
			103	410		14			15,45			14	15,45
				455	17,8	6			12,69			6	12,69
	Spp2	Prp45	143	287				1			2,17	1	2,17
		Brr2	38	168				1			4,12	1	4,12
				445				1			5,97	1	5,97
				454				5			3,46	5	3,46
				769				4			10,34	4	10,34
			46	769				1			4,44	1	4,44
			58	91				3			15,52	3	15,52
				445		1			3,83			1	3,83
			68	454		2		1	1,65		1,27	3	1,65
			133	74				1			6,69	1	6,69
				85				1			3,56	1	3,56
				91		1		5	0,62		16,93	6	16,93
		Bud13/Cwc26	151	115				8			10,72	8	10,72
				120		13		17	12,61		9,30	30	12,61
				136		3		7	7,57		13,17	10	13,17
				146		2		1	0,69		2,77	3	2,77
			154	120		3			1,97			3	1,97
				136				1			5,35	1	5,35
				146		1		2	1,81		9,42	3	9,42
				151				1			2,59	1	2,59
			182	136				2			4,89	2	4,89
		Clf1	151	458				1			2,99	1	2,99
		Cwc24	151	4		1			0,05			1	0,05
		Prp2	82	336		2		5	1,67		7,16	7	7,16
				632				1			3,53	1	3,53
				750		1		1	1,21		3,93	2	3,93
				756		1			1,91			1	1,91
			83	336		1		4	2,28		2,76	5	2,76
				632		2		2	7,68		7,77	4	7,77



Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				640		1			4,92			1	4,92
				756		1		2	3,40		2,90	3	3,40
			95	756				1			5,34	1	5,34
			154	840					2,83			1	2,83
			168	461		1		6	3,34		5,84	1	5,84
			181	461		4		1			2,80	1	2,80
		Prp8	14	835		1			0,32			1	0,32
		Rse1	38	374				6			12,26	6	12,26
			83	374				1			4,28	1	4,28
		SmD2	3	80			1			0,21		1	0,21
		Brr2	362	259		1			0,58			1	0,58
		Cef1	770	293		3	4	2	3,68	4,58	3,13	9	4,58
				294				1			1,22	1	1,22
				296				1			0,78	1	0,78
				312		1			2,91			1	2,91
		Clf1	524	180		3	5	3	5,16	2,04	5,79	11	5,79
			531	180		2		1	2,81		2,27	3	2,81
			650	304		8	3	5	16,67	5,17	6,87	16	16,67
			653	289				1			8,83	1	8,83
				304		12	10	54	17,65	11,96	13,33	76	17,65
		Cus1	146	317		4	5	3	15,41	11,09	10,86	12	15,41
				329				1			1,31	1	1,31
		Cwc2	424	320		4	1	3	5,37	5,03	3,68	8	5,37
			524	310				2			4,43	2	4,43
			531	310				1			1,35	1	1,35
		Cwc22	311	548			1			26,34		1	26,34
		Isy1	146	139		2			5,57			2	5,57
				143		2	4	1	5,24	4,45	4,06	7	5,24
			220	157			1	4		0,70	9,62	5	9,62
				161		3	7	9	2,63	2,37	4,94	19	4,94
				171		9	6	1	4,61	5,04	2,46	16	5,04
			249	157				1			3,79	1	3,79
			259	7				2			5,83	2	5,83
			328	7		1	3	6	10,49	5,14	9,35	10	10,49
				27		1			2,03			1	2,03
				40		2	3	7	2,37	2,44	4,75	12	4,75
			424	7		1	2	5	1,18	5,11	7,02	8	7,02
		Lea1	32	232			1	1		2,40	1,79	2	2,40
		Ntc20	498	27		6		2	4,07		8,58	8	8,58
			558	27		2	2	2	1,41	1,40	5,11	6	5,11
		Pml1	372	153				1			1,13	1	1,13
		Prp11	424	192		1		4	2,48		7,93	5	7,93
		Prp21				4		12	3,40		6,01	16	6,01
		Prp8	2	300			1			0,08		1	0,08
		Syf2	362	11		3	4	8	7,31	2,06	5,86	15	7,31
				14		1		9	10,00		5,80	10	10,00
			413	23		1			9,20			1	9,20
				26		2	4	4	4,66	3,68	5,31	10	5,31
			424	26				1		1,10	3,29	2	3,29
			524	132				1			0,86	1	0,86
			531	121				3			9,05	3	9,05
		Yju2/Cwc16	790	234		1			1,32			1	1,32
		Cef1	159	240				1			3,73	1	3,73
				247			1			1,07		1	1,07
			173	239		3	1		4,95	0,55		4	4,95
				240		5	6	10	7,61	11,75	9,07	21	11,75
				247			4	6		3,71	6,44	10	6,44
			251			2	1	2	4,91	1,42	8,77	5	8,77
			259			1			0,55			1	0,55
		Clf1	121	180				8			9,41	8	9,41
			159	113		7	7	5	4,73	2,95	7,19	19	7,19
			173	25			4	6		2,24	4,57	10	4,57
				113		4		2	10,42		7,42	6	10,42
		Cwc15	9	102		1			0,13			1	0,13
		Ecm2	148	138		1			0,08			1	0,08
		Isy1	26	7		1	4	3	1,75	2,47	4,26	8	4,26
				27			1	4		1,36	4,12	5	4,12
			173	42		1	2		5,98	1,83		3	5,98
		Prp11	26	192		2	3	5	3,34	5,17	6,42	10	6,42
		Prp21					1	1		3,40	4,02	2	4,02
		Prp45	1	71				2			0,22	2	0,22
			142	36				1			1,02	1	1,02
			145	36		15	10	27	13,10	3,00	5,38	52	13,10
			151	36		4	5	10	12,24	4,37	18,80	19	18,80
		Prp46	145	56				1			2,52	1	2,52
				67				1			3,17	1	3,17
				87		1		3	7,44		6,64	4	7,44
				88		2			3,30			2	3,30
		SmB	14	117				1			2,79	1	2,79
		Syf1	11	362		3	4	8	7,31	2,06	5,86	15	7,31
			14	362		1		9	10,00		5,80	10	10,00
			23	413		1			9,20			1	9,20
			26	413		2	4	4	4,66	3,68	5,31	10	5,31

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total	Best
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	spectral count	Score <sub>max</sub>
				424			1	1		1,10	3,29	2	3,29
			121	531							9,05	3	9,05
			132	524							0,86	1	0,86
	Yju2/Cwc16	Yju2/Cwc16	11	22		1			1,04		0,86	1	1,04
		Isy1	63	103			1			0,27		1	0,27
		Prp2	29	732		2			0,44			2	0,44
		Prp45	1	129		1			0,59			1	0,59
		Prp9	68	371				1			2,32	1	2,32
		SmB	2	105				1			1,39	1	1,39
		SmD1	74	128				1			2,94	1	2,94
				140				1			1,97	1	1,97
		Syf1	234	790		1			1,32			1	1,32
		Syf2	22	11		1			1,04			1	1,04
	Ysf3	Cus1	12	102				1			3,31	1	3,31
			15	102		1		1	0,22		1,15	2	1,15
		Cwc22	15	203	147,7	1			0,49			1	0,49
		Hsh155	4	932						0,68		2	0,68
			12	932	12,7			3		3,56		3	3,56
		Rds3	9	13	16,6			1		0,14		1	0,14
Intra	Brr2	Brr2	1	2108			1	1		0,54		1	0,54
			2	28							6,67	8	6,67
				50					4,24		10,41	6	10,41
				74							1,99	1	1,99
				304							2,17	1	2,17
				967							4,29	1	4,29
				1437							2,83	2	2,83
				1623							2,94	1	2,94
				1634							9,97	4	9,97
			7	25							3,75	1	3,75
				50							4,06	2	4,06
				967							1,41	1	1,41
			9	91							2,74	1	2,74
			11	720							0,99	1	0,99
			25	7							3,75	1	3,75
				50							3,50	5	3,50
				59			3			1,47	2,26	1	2,26
				454						0,74		1	0,74
				1437			1				1,30	1	1,30
				1623							1,37	1	1,37
			28	2		1			4,24		6,67	8	6,67
				50							4,89	13	4,89
				71							1,55	1	1,55
				74							5,74	2	5,74
				82							5,97	1	5,97
				91							0,39	1	0,39
				454							2,58	1	2,58
				967							10,20	1	10,20
			50	2							10,41	6	10,41
				7							4,06	2	4,06
				25							3,50	5	3,50
				28							3,74	13	4,89
				59							10,06	63	14,40
				71							3,53	10	3,53
				74							7,80	15	9,88
				82							7,03	4	7,03
				85							0,48	5	6,86
				91							5,34	5	8,41
				967							1,11	1	1,11
				1623							3,23	1	3,23
				1634							4,28	1	4,28
			59	25							2,26	1	2,26
				50							10,06	63	14,40
				74							14,69	24	14,69
				82							0,59	8	9,87
				85							1,78	4	2,87
				91							7,99	8	19,64
			71	28							1,55	1	1,55
				50							3,53	10	3,53
				82							6,25	13	6,25
				85							5,97	9	5,97
				90							4,12	4	4,12
				91							5,55	8	9,23
			74	2							1,99	1	1,99
				28							5,74	2	5,74
				50							7,80	15	9,88
				59							14,69	24	14,69
				85							5,70	27	8,15
				90							0,97	5	4,30
				91							13,71	14	15,07
			82	28							5,97	1	5,97
				50							7,03	4	7,03
				59							0,59	8	9,87
				71							6,25	13	6,25

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				90			1	12		0,39	5,76	13	5,76
				91		2	6	19	4,57	8,99	13,27	27	13,27
				1051				1			1,49	1	1,49
		85		50			1	4		0,48	6,86	5	6,86
				59			3	1		1,78	2,87	4	2,87
				71			6	3		5,97	4,96	9	5,97
				74		1	6	20	4,46	5,70	8,15	27	8,15
				91		11	17	30	8,76	9,01	11,41	58	11,41
				454			2			0,25		2	0,25
		90		71			3	1		4,12	2,51	4	4,12
				74			2	3		0,97	4,30	5	4,30
				82			1	12		0,39	5,76	13	5,76
				454		1	6	5	1,51	2,79	4,69	12	4,69
		91		9				1			2,74	1	2,74
				28			1			0,39		1	0,39
				50			1	4		5,34	8,41	5	8,41
				59			1	7		7,99	19,64	8	19,64
				71			4	4		5,55	9,23	8	9,23
				74			5	9		13,71	15,07	14	15,07
				82		2	6	19	4,57	8,99	13,27	27	13,27
				85		11	17	30	8,76	9,01	11,41	58	11,41
				431				1			5,50	1	5,50
				445			2			5,94		2	5,94
				1051		4		2	1,74		4,21	6	4,21
		152	190	11,8				20			21,68	20	21,68
		168	717	9,9		1	2	2	0,51	1,34	2,54	5	2,54
		190	152	11,8				20			21,68	20	21,68
		271	304				1	6		3,22	7,63	7	7,63
			351					1			1,03	1	1,03
		276	304					1			7,89	1	7,89
			380					1			14,08	1	14,08
			967	52,2				1			4,52	1	4,52
		304	2					1			2,17	1	2,17
			271				1	6		3,22	7,63	7	7,63
			276					1			7,89	1	7,89
			339			5	7	3	6,02	8,77	9,54	15	9,54
			414					2			1,99	2	1,99
			417				2	7		3,17	12,29	9	12,29
			967					1			1,95	1	1,95
			1372					1			12,26	1	12,26
			1529					2			10,19	2	10,19
			1634					1			2,70	1	2,70
		339	304			5	7	3	6,02	8,77	9,54	15	9,54
		351	271					1			1,03	1	1,03
			398					1			1,86	1	1,86
			417					1			1,71	1	1,71
		364	1529					1			6,89	1	6,89
		380	276					1			14,08	1	14,08
		390	398				1			0,09		1	0,09
			417				2	2		5,20	1,46	4	5,20
		398	351					1			1,86	1	1,86
			390				1			0,09		1	0,09
			967					1			3,64	1	3,64
		414	304					2			1,99	2	1,99
			417			3	7	10	9,40	3,59	6,31	20	9,40
			967			2	1	13	2,60	0,39	8,45	16	8,45
		417	304				2	7		3,17	12,29	9	12,29
			351					1			1,71	1	1,71
			390				2	2		5,20	1,46	4	5,20
			414			3	7	10	9,40	3,59	6,31	20	9,40
			967			5	10	25	5,15	7,58	8,61	40	8,61
		431	91					1			5,50	1	5,50
		445	91				2			5,94		2	5,94
			457	21,5			2			1,49		2	1,49
		454	25				1			0,74		1	0,74
			28				1			2,58		1	2,58
			85				2			0,25		2	0,25
			90			1	6	5	1,51	2,79	4,69	12	4,69
		457	445	21,5			2			1,49		2	1,49
		546	549	8,3		24	54	12	14,56	9,53	11,58	90	14,56
		549	546	8,3		24	54	12	14,56	9,53	11,58	90	14,56
			584	13,3		7	4	8	11,10	9,36	9,50	19	11,10
			1904	21,4		7	8	51	18,55	7,94	9,46	66	18,55
		564	611	9,9			9	8		8,38	11,63	17	11,63
			1138	20,9		2	8	95	2,38	4,23	10,34	105	10,34
		584	549	13,3		7	4	8	11,10	9,36	9,50	19	11,10
			597	13,3		2	2	7	6,03	8,55	15,58	11	15,58
		597	584	13,3		2	2	7	6,03	8,55	15,58	11	15,58
			1589	19,0		5	6	69	11,85	11,53	25,58	80	25,58
			1896	13,4		12	10	29	3,90	1,34	3,41	51	3,90
			1904	20,8		3	13	15	2,55	3,42	4,62	31	4,62
		611	564	9,9			9	8		8,38	11,63	17	11,63
			1138	22,4				4			10,10	4	10,10

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			659	967	22,4			1			2,35	1	2,35
			717	168	9,9	1	2	2	0,51	1,34	2,54	5	2,54
			720	720	4,9	1	7	9	5,58	0,65	3,77	17	5,58
			720	11				1			0,99	1	0,99
			717	4,9		1	7	9	5,58	0,65	3,77	17	5,58
			748	17,1			4	10		3,83	5,87	14	5,87
			748	720	17,1		4	10		3,83	5,87	14	5,87
			758	15,6				2			7,77	2	7,77
			760	18,2			1			3,01		1	3,01
			769	25,3			1			1,75		1	1,75
			795	15,6		17	68	128	10,40	6,59	7,71	213	10,40
			1088	14,8				2			1,49	2	1,49
			758	748	15,6			2			7,77	2	7,77
			778	16,5			8	28		7,79	11,55	36	11,55
			782	16,8			12	1		2,09	1,53	13	2,09
			795	9,2		11	21	5	7,32	4,12	3,85	37	7,32
			760	748	18,2		1			3,01		1	3,01
			769	748	25,3		1			1,75		1	1,75
			778	778	13,2		2	1		3,98	1,63	3	3,98
			778	758	16,5		8	28		7,79	11,55	36	11,55
			769	769	13,2		2	1		3,98	1,63	3	3,98
			795	795	13,5	3	12	9	4,65	4,52	5,37	24	5,37
			782	758	16,8		12	1		2,09	1,53	13	2,09
			795	795	10,5		7	6		13,60	9,20	13	13,60
			795	748	15,6	17	68	128	10,40	6,59	7,71	213	10,40
			758	758	9,2	11	21	5	7,32	4,12	3,85	37	7,32
			778	778	13,5	3	12	9	4,65	4,52	5,37	24	5,37
			782	782	10,5		7	6		13,60	9,20	13	13,60
			967	2				1			4,29	1	4,29
				7				1			1,41	1	1,41
				28				1			10,20	1	10,20
				50				1			1,11	1	1,11
				276	52,2			1			4,52	1	4,52
				304				1			1,95	1	1,95
				398				1			3,64	1	3,64
				414		2	1	13	2,60	0,39	8,45	16	8,45
				417		5	10	25	5,15	7,58	8,61	40	8,61
				659	22,4			1			2,35	1	2,35
			1042	1055	20,3		1			1,60		1	1,60
			1051	82				1			1,49	1	1,49
				91		4		2	1,74		4,21	6	4,21
				1055	5,8	1	5	13	2,44	2,76	6,40	19	6,40
			1055	1042	20,3		1			1,60		1	1,60
				1051	5,8	1	5	13	2,44	2,76	6,40	19	6,40
			1088	748	14,8			2			1,49	2	1,49
			1138	564	20,9	2	8	95	2,38	4,23	10,34	105	10,34
				611	22,4			4			10,10	4	10,10
				1150	14,1	1	8	31	3,91	9,00	14,48	40	14,48
			1150	1138	14,1	1	8	31	3,91	9,00	14,48	40	14,48
				1187	15,1		2			0,96		2	0,96
				1634	57,5		1			1,42		1	1,42
			1158	1187	13,9		4	6		2,27	8,41	10	8,41
			1187	1150	15,1		2			0,96		2	0,96
				1158	13,9		4	6		2,27	8,41	10	8,41
			1372	304				1			12,26	1	12,26
			1392	1504	12,8			1			1,78	1	1,78
			1437	2				2			2,83	2	2,83
				25				1			1,30	1	1,30
				2116	16,9			3			6,61	3	6,61
				2121	16,5	7	14	74	14,39	7,39	13,36	95	14,39
			1441	2121	19,1			2			15,61	2	15,61
			1504	1392	12,8			1			1,78	1	1,78
			1529	304				2			10,19	2	10,19
				364				1			6,89	1	6,89
			1589	597	19,0	5	6	69	11,85	11,53	25,58	80	25,58
				1896	10,2	1	4	24	1,08	0,98	3,73	29	3,73
				1904	19,2	8	11	72	16,27	6,25	10,71	91	16,27
			1600	1634	14,5			6			9,18	6	9,18
			1603	1634	14,4		3	6		1,02	4,62	9	4,62
			1623	2				1			2,94	1	2,94
				25			1			1,37		1	1,37
				50				1			3,23	1	3,23
			1634	2				4			9,97	4	9,97
				50				1			4,28	1	4,28
				304				1			2,70	1	2,70
				1150	57,5		1			1,42		1	1,42
				1600	14,5			6			9,18	6	9,18
				1603	14,4		3	6		1,02	4,62	9	4,62
			1896	597	13,4	12	10	29	3,90	1,34	3,41	51	3,90
				1589	10,2	1	4	24	1,08	0,98	3,73	29	3,73
				1904	14,9		4	6		3,36	5,90	10	5,90
			1904	549	21,4	7	8	51	18,55	7,94	9,46	66	18,55
				597	20,8	3	13	15	2,55	3,42	4,62	31	4,62

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>C<sub>max</sub></sub>			Total spectral count	Best Score <sub>C<sub>max</sub></sub>	
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3			
					1589	19,2	8	11	72	16,27	6,25	10,71	91	16,27
					1896	14,9		4	6		3,36	5,90	10	5,90
			2070	2115	12,7			6	8		6,52	10,99	14	10,99
			2108	1				1			0,54		1	0,54
			2115	2070	12,7			6	8		6,52	10,99	14	10,99
				2121	17,3			5	4		2,09	2,43	9	2,43
			2116	1437	16,9				3			6,61	3	6,61
			2121	1437	16,5	7	14	74	14,39	7,39	13,36	95	14,39	
				1441	19,1				2		15,61	2	15,61	
				2115	17,3			5	4		2,09	2,43	9	2,43
	Bud13/Cwc26	Bud13/Cwc26	2	101				1			3,08	1	3,08	
			15	19			1			0,21		1	0,21	
				21			1			5,91		1	5,91	
			19	15			1			0,21		1	0,21	
				41					1		1,56	1	1,56	
			21	15			1			5,91		1	5,91	
			24	35					3		3,80	3	3,80	
				41					1		3,47	1	3,47	
				53					1		2,49	1	2,49	
			25	35		1	1	2	1,20	0,84	5,34	4	5,34	
				41					1		2,07	1	2,07	
			28	41		1		8	6,18		14,29	9	14,29	
				53					6		6,54	6	6,54	
			35	24					3		3,80	3	3,80	
				25		1	1	2	1,20	0,84	5,34	4	5,34	
				53					3		8,98	3	8,98	
				61					1		3,56	1	3,56	
			41	19					1		1,56	1	1,56	
				24					1		3,47	1	3,47	
				25					1		2,07	1	2,07	
				28		1		8	6,18		14,29	9	14,29	
				53					9		12,17	13	12,17	
				61				4		3,09	12,17	13	12,17	
				64				3		3,34	7,69	6	7,69	
				68				1		1,88		1	1,88	
				68		1	1	2	4,67	1,93	7,43	4	7,43	
				72					1		3,22	1	3,22	
			53	24					1		2,49	1	2,49	
				28					6		6,54	6	6,54	
				35					3		8,98	3	8,98	
				41				4		3,09	12,17	13	12,17	
				68				1		1,13	5,85	4	5,85	
				115					1		2,39	1	2,39	
			61	35					1		3,56	1	3,56	
				41				3		3,34	7,69	6	7,69	
				66		1				3,45		1	3,45	
				68		2			7	7,24	5,57	9	7,24	
				72					1		3,68	1	3,68	
				115					3		4,79	3	4,79	
			64	41			1			1,88		1	1,88	
				68		1	5	3	2,98	1,90	3,80	9	3,80	
				97					1		2,58	1	2,58	
			66	61		1				3,45		1	3,45	
				41		1	1	2	4,67	1,93	7,43	4	7,43	
				53			1	3		1,13	5,85	4	5,85	
				61		2		7	7,24		5,57	9	7,24	
				64		1	5	3	2,98	1,90	3,80	9	3,80	
				97					1		7,93	1	7,93	
			72	41							7,93	1	7,93	
				61					1		3,22	1	3,22	
				61					1		3,68	1	3,68	
			97	64					1		2,58	1	2,58	
				68					1		7,93	1	7,93	
				120					1		5,85	1	5,85	
			101	2					1		3,08	1	3,08	
				115		2		5	16,70		6,15	7	16,70	
				120			2	1		1,30	4,37	3	4,37	
			115	53							2,39	1	2,39	
				61					3		4,79	3	4,79	
				101		2		5	16,70		6,15	7	16,70	
				120		6	10	20	2,96	9,61	6,67	36	9,61	
				130		1	2	12	3,08	6,06	9,19	15	9,19	
				136		3		7	7,16		9,97	10	9,97	
			120	97					1		5,85	1	5,85	
				101				2		1,30	4,37	3	4,37	
				115		6	10	20	2,96	9,61	6,67	36	9,61	
				130		3	13	36	11,28	6,89	10,21	52	11,28	
				136		3	3	3	7,47	3,22	2,54	9	7,47	
				146		1	2		8,97	5,49		3	8,97	
				151		4			10,35			4	10,35	
			130	115		1	2	12	3,08	6,06	9,19	15	9,19	
				120		3	13	36	11,28	6,89	10,21	52	11,28	
				146					2		7,00	2	7,00	
			136	115		3		7	7,16		9,97	10	9,97	
				120		3	3	3	7,47	3,22	2,54	9	7,47	

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				146			1	13		0,49	11,34	14	11,34
				151		4		2	8,47		2,60	6	8,47
			146	120		1	2		8,97	5,49		3	8,97
				130				2			7,00	2	7,00
				136			1	13		0,49	11,34	14	11,34
			151	120		4			10,35			4	10,35
				136		4		2	8,47		2,60	6	8,47
			179	181			5	2		4,64	5,41	7	5,41
				201				1			5,33	1	5,33
				206		5	6	13	6,72	8,97	6,97	24	8,97
				256			1	4		0,05	9,52	5	9,52
			180	206				1			7,72	1	7,72
				256				1			4,92	1	4,92
			181	179			5	2		4,64	5,41	7	5,41
				206		6	9	34	19,87	5,70	8,73	49	19,87
				256				5			7,16	5	7,16
			201	179				1			5,33	1	5,33
				206		3	6	24	17,55	10,00	11,33	33	17,55
				213				7			9,31	7	9,31
				217				2			8,21	2	8,21
			206	179		5	6	13	6,72	8,97	6,97	24	8,97
				180				1			7,72	1	7,72
				181		6	9	34	19,87	5,70	8,73	49	19,87
				201		3	6	24	17,55	10,00	11,33	33	17,55
				213			2	2		5,58	6,81	4	6,81
				217			3	8		4,81	8,80	11	8,80
			213	201				7			9,31	7	9,31
				206			2	2		5,58	6,81	4	6,81
			217	201				2			8,21	2	8,21
				206			3	8		4,81	8,80	11	8,80
			256	179			1	4		0,05	9,52	5	9,52
				180				1			4,92	1	4,92
				181				5			7,16	5	7,16
	Bud31	Bud31	5	20		1			2,53			1	2,53
			10	20		1			1,92			1	1,92
			20	5		1			2,53			1	2,53
				10		1			1,92			1	1,92
			37	44	10,2		1			0,28		1	0,28
			44	37	10,2		1			0,28		1	0,28
			69	71	5,8	1			0,53			1	0,53
			71	69	5,8	1			0,53			1	0,53
	Cef1	Cef1	22	59	12,4	1	3		2,22	6,24		4	6,24
			59	22	12,4	1	3		2,22	6,24		4	6,24
			180	187				1			7,80	1	7,80
			187	180				1			7,80	1	7,80
				201		2			1,81			2	1,81
			201	187		2			1,81			2	1,81
			239	247	13,0	1		1	0,64		3,78	2	3,78
				251	19,0			1			6,43	1	6,43
			240	247	11,0	7	10	11	6,18	3,89	4,69	28	6,18
				251	16,9	2	6	2	11,13	5,98	5,20	10	11,13
			247	239	13,0	1		1	0,64		3,78	2	3,78
				240	11,0	7	10	11	6,18	3,89	4,69	28	6,18
				251	6,2		2			1,16		2	1,16
				257	15,3		1			0,06		1	0,06
				259	18,5		1			0,19		1	0,19
			251	239	19,0			1			6,43	1	6,43
				240	16,9	2	6	2	11,13	5,98	5,20	10	11,13
				247	6,2		2			1,16		2	1,16
			257	247	15,3		1			0,06		1	0,06
			259	247	18,5		1			0,19		1	0,19
			293	296		10	2	33	19,98	1,64	14,00	45	19,98
			296	293		10	2	33	19,98	1,64	14,00	45	19,98
				308			1			0,26		1	0,26
			305	312		2			4,54			2	4,54
				314		4			12,62			4	12,62
				318				2			6,69	2	6,69
				353		1	2		1,94	1,90		3	1,94
				356				1			4,33	1	4,33
			308	359			1	2		0,23	2,73	3	2,73
				296			1			0,26		1	0,26
				321				1			3,27	1	3,27
				353		1		1	6,11		3,15	2	6,11
				359		1			2,23			1	2,23
			312	305		2			4,54			2	4,54
				314		2			3,18			2	3,18
				318		4		5	5,43		6,08	9	6,08
				353				2			8,80	2	8,80
				356		1			0,73			1	0,73
				359		1	1		1,80	1,09		2	1,80
			314	305		4			12,62			4	12,62
				312		2			3,18			2	3,18
				321		5		1	7,68		4,29	6	7,68

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			318	305				2			6,69	2	6,69
				312		4		5	5,43		6,08	9	6,08
				321		2	1	4	1,63	3,63	4,01	7	4,01
				335				1			1,76	1	1,76
				353				1			3,81	1	3,81
			321	308				1			3,27	1	3,27
				314		5		1	7,68		4,29	6	7,68
				318		2	1	4	1,63	3,63	4,01	7	4,01
			335	318				1			1,76	1	1,76
			353	305		1	2		1,94	1,90		3	1,94
				308		1		1	6,11		3,15	2	6,11
				312				2			8,80	2	8,80
				318				1			3,81	1	3,81
				359		1	1	1	0,24	1,79	2,42	3	2,42
				364		2	2	3	0,84	0,85	1,96	7	1,96
			356	305				1			4,33	1	4,33
				312		1			0,73			1	0,73
				364				1			1,53	1	1,53
			359	305			1	2		0,23	2,73	3	2,73
				308		1			2,23			1	2,23
				312		1	1		1,80	1,09		2	1,80
				353		1	1	1	0,24	1,79	2,42	3	2,42
			364	353		2	2	3	0,84	0,85	1,96	7	1,96
				356				1			1,53	1	1,53
	Cif1	Cif1	24	28				5			2,75	5	2,75
			25	111		1		1	0,47		3,22	2	3,22
			28	24				5			2,75	5	2,75
			111	25		1		1	0,47		3,22	2	3,22
			281	304		1		1	0,19		4,13	2	4,13
			304	281		1		1	0,19		4,13	2	4,13
			352	399				2			5,61	2	5,61
			399	352				2			5,61	2	5,61
			529	532		11	4	9	5,44	3,71	4,44	24	5,44
			532	529		11	4	9	5,44	3,71	4,44	24	5,44
			605	679		1			1,17			1	1,17
			635	640				3			6,37	3	6,37
			640	635				3			6,37	3	6,37
				668				1			2,54	1	2,54
				679		2		2	5,39		7,80	4	7,80
			668	640				1			2,54	1	2,54
				673		5	3	26	11,23	4,56	9,23	34	11,23
				679				2			4,00	2	4,00
			670	679		3		2	0,80		3,82	5	3,82
				680				1			0,47	1	0,47
			673	668		5	3	26	11,23	4,56	9,23	34	11,23
			679	605		1			1,17			1	1,17
				640		2		2	5,39		7,80	4	7,80
				668				2			4,00	2	4,00
				670		3		2	0,80		3,82	5	3,82
				682		4	3	1	5,77	2,48	2,21	8	5,77
			680	670				1			0,47	1	0,47
			682	679		4	3	1	5,77	2,48	2,21	8	5,77
	Cus1	Cus1	2	58		1			0,87			1	0,87
			39	41		4	11	22	2,49	4,59	6,67	37	6,67
				48		2	5	18	0,94	4,56	8,19	25	8,19
				50				2			0,43	2	0,43
				53		1	3	7	1,97	1,07	5,10	11	5,10
			40	53				1			5,61	1	5,61
			41	39		4	11	22	2,49	4,59	6,67	37	6,67
				50				1			0,80	1	0,80
				53		1	7	16	5,65	4,56	7,37	24	7,37
			48	39		2	5	18	0,94	4,56	8,19	25	8,19
				53		6	3	22	2,64	5,74	11,98	31	11,98
				58		1	5	1	1,95	1,58	2,06	7	2,06
				61				1			0,49	1	0,49
				64				3			3,01	3	3,01
			50	39			2				0,43	2	0,43
				41				1			0,80	1	0,80
				58			1	9		0,41	3,33	10	3,33
				64			1			0,30		1	0,30
			53	39		1	3	7	1,97	1,07	5,10	11	5,10
				40				1			5,61	1	5,61
				41		1	7	16	5,65	4,56	7,37	24	7,37
				48		6	3	22	2,64	5,74	11,98	31	11,98
				61		5	11	74	11,82	2,66	9,67	90	11,82
				64		5	9	19	8,61	7,23	9,56	33	9,56
			58	2		1			0,87			1	0,87
				48		1	5	1	1,95	1,58	2,06	7	2,06
				50			1	9		0,41	3,33	10	3,33
				64		6	9	10	5,40	4,87	9,31	25	9,31
				83				1			2,06	1	2,06
			61	48				1			0,49	1	0,49
				53		5	11	74	11,82	2,66	9,67	90	11,82



Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>	
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3			
				79				2			6,33	2	6,33	
			64	48				3			3,01	3	3,01	
				50				1			0,30	1	0,30	
				53			5	9	19	8,61	7,23	9,56	33	9,56
				58			6	9	10	5,40	4,87	9,31	25	9,31
				79					2			8,20	2	8,20
				83					4			6,60	4	6,60
			79	61					2			6,33	2	6,33
				64					2			8,20	2	8,20
				86			8	1	44	7,02	5,02	9,78	53	9,78
				95					3			11,01	3	11,01
			83	58					1			2,06	1	2,06
				64					4			6,60	4	6,60
				95				3	5		1,03	3,62	8	3,62
			86	79			8	1	44	7,02	5,02	9,78	53	9,78
				95					3			11,01	3	11,01
				83				3	5		1,03	3,62	8	3,62
				102			3	5	4	16,44	3,76	11,26	12	16,44
			102	95			3	5	4	16,44	3,76	11,26	12	16,44
			202	226				1	2		3,89	9,01	3	9,01
				246			12	17	41	22,72	14,98	14,75	70	22,72
				379					2			7,64	2	7,64
			223	236					2			2,17	2	2,17
			226	202				1	2		3,89	9,01	3	9,01
				236				8	6		5,33	4,01	14	5,33
			236	223					2			2,17	2	2,17
				226				8	6		5,33	4,01	14	5,33
				246				5	2		9,36	10,64	7	10,64
			246	202			12	17	41	22,72	14,98	14,75	70	22,72
				236				5	2		9,36	10,64	7	10,64
			317	347				3			3,78	3	3,78	
			329	347			1	4		3,04	4,83	5	4,83	
			347	317				3			3,78	3	3,78	
				329			1	4		3,04	4,83	5	4,83	
				358			3	2		2,00	0,20	5	2,00	
			358	347			3	2		2,00	0,20	5	2,00	
			379	202					2			7,64	2	7,64
	Cwc15	Cwc15	38	41			2	2		7,21	2,26	4	7,21	
				43				1			0,03	1	0,03	
			41	38			2	2		7,21	2,26	4	7,21	
			43	38				1			0,03	1	0,03	
			88	102			1	2		2,13	1,13	3	2,13	
			91	104				1			0,77	1	0,77	
			102	88			1	2		2,13	1,13	3	2,13	
				108			2	2	4	1,08	4,06	6,02	8	6,02
				118					1			2,99	1	2,99
			104	91				1			0,77	1	0,77	
				129					2			7,19	2	7,19
			108	102			2	2	4	1,08	4,06	6,02	8	6,02
				129			2			8,61		6,02	2	8,61
			118	102					1			2,99	1	2,99
				129			6	5	11	8,14	7,16	9,75	22	9,75
				140			1	1		1,09	2,63		2	2,63
			129	104					2			7,19	2	7,19
				108			2			8,61		6,62	2	8,61
				118			6	5	11	8,14	7,16	9,75	22	9,75
				137			3	1		8,29	0,85		4	8,29
				140			4	6	5	6,64	9,52	7,70	15	9,52
				145				1			3,95		1	3,95
			137	129			3	1		8,29	0,85		4	8,29
				145			2			3,46			2	3,46
			140	118			1	1		1,09	2,63		2	2,63
				129			4	6	5	6,64	9,52	7,70	15	9,52
				151				2	2		2,07	5,16	4	5,16
			145	129				1			3,95		1	3,95
				137			2			3,46			2	3,46
				151			1	2	4	4,45	3,80	6,62	7	6,62
				140				2	2		2,07	5,16	4	5,16
				145			1	2	4	4,45	3,80	6,62	7	6,62
	Cwc2	Cwc2	2	10				1			2,02		1	2,02
				2				1			2,02		1	2,02
				86	13,6				1			3,30	1	3,30
			61	86	10,5				1			1,98	1	1,98
			86	10	13,6				1			3,30	1	3,30
				61	10,5				1			1,98	1	1,98
			116	152				3			3,54		3	3,54
			135	152				1			1,28		1	1,28
			152	116				3			3,54		3	3,54
				135				1			1,28		1	1,28
				179				2			2,12		2	2,12
			179	152				2			2,12		2	2,12
				236		28,0			2			11,38	2	11,38
			185	236	15,4			2			1,73		2	1,73

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>E<sub>max</sub></sub>			Total spectral count	Best Score <sub>E<sub>max</sub></sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			236	179	28,0			2			11,38	2	11,38
				185	15,4			2		1,73		2	1,73
			310	320		3	4	7	3,22	5,82	5,67	14	5,82
			320	310		3	4	7	3,22	5,82	5,67	14	5,82
	Cwc21	Cwc21	47	53		3	2	4	4,27	1,64	5,88	9	5,88
			53	47		3	2	4	4,27	1,64	5,88	9	5,88
				62		1	3		0,66	3,71		4	3,71
			62	53		1	3		0,66	3,71		4	3,71
			97	105		19	9	97	13,12	10,74	20,89	125	20,89
			98	105		35	34	89	11,32	6,04	16,07	158	16,07
			105	97		19	9	97	13,12	10,74	20,89	125	20,89
	Cwc22	Cwc22		98		35	34	89	11,32	6,04	16,07	158	16,07
			294	316	12,8			2			10,65	2	10,65
			316	294	12,8			2			10,65	2	10,65
			406	444	6,3			1			9,70	1	9,70
			444	406	6,3			1			9,70	1	9,70
			495	505				5			3,07	5	3,07
			496	505				1			2,78	1	2,78
			505	495				5			3,07	5	3,07
				496				1			2,78	1	2,78
				508		6			2,05			6	2,05
			508	505		6			2,05			6	2,05
			520	530		6	5	7	6,60	1,97	3,93	18	6,60
			530	520		6	5	7	6,60	1,97	3,93	18	6,60
	Cwc24	Cwc24	63	67		2	2		4,00	3,97		4	4,00
			67	63		2	2		4,00	3,97		4	4,00
			93	123		4	1	5	3,57	3,31	7,13	10	7,13
			123	93		4	1	5	3,57	3,31	7,13	10	7,13
			148	169	15,2		5	2		4,97	3,91	7	4,97
			169	148	15,2		5	2		4,97	3,91	7	4,97
			186	232	16,5	1		1	3,36		5,25	2	5,25
			194	203	19,0	4	3	4	4,38	5,27	5,88	11	5,88
				256		1			0,08			1	0,08
			203	194	19,0	4	3	4	4,38	5,27	5,88	11	5,88
				229		1		2	3,05		1,27	3	3,05
			225	229	6,6			1			1,98	1	1,98
			229	203	18,7	1		2	3,05		1,27	3	3,05
				225	6,6			1			1,98	1	1,98
			232	186	16,5	1		1	3,36		5,25	2	5,25
			256	194		1			0,08			1	0,08
	Cwc27	Cwc27	36	171		3			2,82			3	2,82
			56	146				1			2,68	1	2,68
			146	56				1			2,68	1	2,68
			171	36		3			2,82			3	2,82
			225	234				1			2,94	1	2,94
			234	225				1			2,94	1	2,94
			278	289		3		6	7,00		6,15	9	7,00
			289	278		3		6	7,00		6,15	9	7,00
				295		1			0,27			1	0,27
				297		4	6	14	5,00	4,97	6,99	24	6,99
			295	289		1			0,27			1	0,27
			297	289		4	6	14	5,00	4,97	6,99	24	6,99
	Ecm2	Ecm2	47	57	9,0			3			4,44	3	4,44
			57	47	9,0			3			4,44	3	4,44
			116	138				1			2,97	1	2,97
				157				1			1,82	1	1,82
			119	157				5			7,84	5	7,84
			138	116				1			2,97	1	2,97
				157				5			5,28	5	5,28
				164				1			1,77	1	1,77
				167				1			7,61	1	7,61
			140	164				1			5,66	1	5,66
			157	116				1			1,82	1	1,82
				119				5			7,84	5	7,84
				138				5			5,28	5	5,28
				167		4	2	10	8,34	3,76	12,22	16	12,22
				173				3			4,01	3	4,01
				247				1			1,49	1	1,49
				277		1			0,27			1	0,27
			164	138				1			1,77	1	1,77
				140				1			5,66	1	5,66
				173				5			6,16	5	6,16
				337				1			5,06	1	5,06
			167	138				1			7,61	1	7,61
				157		4	2	10	8,34	3,76	12,22	16	12,22
				247		3	3	1	5,86	4,25	5,43	7	5,86
				311				2			10,95	2	10,95
				318				1			5,27	1	5,27
				337				1			8,56	1	8,56
			173	157				3			4,01	3	4,01
				164				5			6,16	5	6,16
				245	18,2			1			4,58	1	4,58
				247	14,2	1		2	3,56		5,85	3	5,85

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				311				1			5,13	1	5,13
			177	245	12,3		1			0,94		1	0,94
			188	274				3			4,38	3	4,38
			189	265			1			2,93		1	2,93
			198	265		5	5	5	28,24	10,98	8,48	15	28,24
				277		1			1,19			1	1,19
			230	233			4	3		4,11	4,96	7	4,96
				265	20,3	19	12	33	32,27	6,16	10,72	64	32,27
			233	230			4	3		4,11	4,96	7	4,96
				265		1			0,06			1	0,06
			245	173	18,2			1			4,58	1	4,58
				177	12,3		1			0,94		1	0,94
			247	157				1			1,49	1	1,49
				167		3	3	1	5,86	4,25	5,43	7	5,86
				173	14,2	1		2	3,56		5,85	3	5,85
			265	189			1			2,93		1	2,93
				198		5	5	5	28,24	10,98	8,48	15	28,24
				230	20,3	19	12	33	32,27	6,16	10,72	64	32,27
				233		1			0,06			1	0,06
			274	188				3			4,38	3	4,38
				318				2			6,59	2	6,59
				331				1			2,85	1	2,85
				337				1			3,12	1	3,12
				342				1			1,44	1	1,44
			277	157		1			0,27			1	0,27
				198		1			1,19			1	1,19
			311	167				2			10,95	2	10,95
				173				1			5,13	1	5,13
			318	167				1			5,27	1	5,27
				274				2			6,59	2	6,59
			331	274				1			2,85	1	2,85
			337	164				1			5,06	1	5,06
				167				1			8,56	1	8,56
				274				1			3,12	1	3,12
			342	274				1			1,44	1	1,44
	Hsh155	Hsh155	35	45		1	1	10	2,62	5,55	7,08	12	7,08
				51			1	3		0,37	5,65	4	5,65
				66				2			4,45	2	4,45
				72				1			2,34	1	2,34
			45	35		1	1	10	2,62	5,55	7,08	12	7,08
				66			3	1		3,20	9,81	4	9,81
			51	35			1	3		0,37	5,65	4	5,65
				66				1		0,81		1	0,81
			66	35				2			4,45	2	4,45
				45			3	1		3,20	9,81	4	9,81
				51			1			0,81		1	0,81
			72	35				1			2,34	1	2,34
				237				3			4,63	5	5,77
			150	151				1			1,84	1	1,84
				158		2	6	42	2,30	5,25	11,34	50	11,34
			151	150				1			1,84	1	1,84
			158	150		2	6	42	2,30	5,25	11,34	50	11,34
				191				8		9,77	5,29	14	9,77
			172	191	16,0			1			1,81	1	1,81
			191	158				8		9,77	5,29	14	9,77
				172	16,0			1			1,81	1	1,81
			237	72			3	2		4,63	5,77	5	5,77
				276	10,8	12	1		8,55	1,25		13	8,55
			276	237	10,8	12	1		8,55	1,25		13	8,55
			410	455		1			2,56			1	2,56
			455	410		1			2,56			1	2,56
			473	521	16,9			3			5,34	3	5,34
			521	473	16,9			3			5,34	3	5,34
			696	699	9,3		1			1,39		1	1,39
			699	696	9,3		1			1,39		1	1,39
	Hsh49	Hsh49	1	2				1			3,97	1	3,97
			2	1				1			3,97	1	3,97
			22	39		11	5	16	3,26	0,85	1,87	32	3,26
				42		4	2	2	1,36	0,20	2,19	8	2,19
			39	22		11	5	16	3,26	0,85	1,87	32	3,26
			42	22		4	2	2	1,36	0,20	2,19	8	2,19
			101	133			1	1		0,40	4,53	2	4,53
			113	193				1			4,87	1	4,87
			126	133			1			0,45		1	0,45
			130	160			1	3		1,53	2,99	4	2,99
				166		2	17	2	3,42	3,45	2,68	21	3,45
			133	101			1	1		0,40	4,53	2	4,53
				126			1			0,45		1	0,45
				213				1			5,74	1	5,74
			160	130			1	3		1,53	2,99	4	2,99
			166	130		2	17	2	3,42	3,45	2,68	21	3,45
			193	113				1			4,87	1	4,87
			204	213				1			5,08	1	5,08

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			213	133				1			5,74	1	5,74
				204				1			5,08	1	5,08
	Isy1	Isy1	7	27		3	2	6	11,09	5,81	12,96	11	12,96
				42			2	1		0,70	1,60	3	1,60
				45		1	3		0,86	3,71		4	3,71
				59		1			0,47			1	0,47
			27	7		3	2	6	11,09	5,81	12,96	11	12,96
				40		7	3	2	4,61	1,77	2,80	12	4,61
				42			1	2		2,63	1,73	3	2,63
				45		3	2	4	8,36	6,79	10,44	9	10,44
				56		2	3	11	1,01	2,43	4,30	16	4,30
				59			1			0,35		1	0,35
				61				1			1,94	1	1,94
			40	27		7	3	2	4,61	1,77	2,80	12	4,61
			42	7			2	1		0,70	1,60	3	1,60
				27			1	2		2,63	1,73	3	2,63
			45	7		1	3		0,86	3,71		4	3,71
				27		3	2	4	8,36	6,79	10,44	9	10,44
			56	27		2	3	11	1,01	2,43	4,30	16	4,30
				61				3			5,35	3	5,35
				7		1			0,47			1	0,47
				27			1			0,35		1	0,35
			61	27				1			1,94	1	1,94
				56				3			5,35	3	5,35
			121	139		9	9	11	5,87	5,51	6,68	29	6,68
				143		1	1		2,06	0,58		2	2,06
			139	121		9	9	11	5,87	5,51	6,68	29	6,68
			143	121		1	1		2,06	0,58		2	2,06
	Lea1	Lea1	194	215		2	6	6	4,07	0,65	4,87	14	4,87
				232		2	2	10	5,00	3,61	4,08	14	5,00
			205	215			3	1		0,95	1,30	4	1,30
				232			3	6		4,59	4,67	9	4,67
			215	194		2	6	6	4,07	0,65	4,87	14	4,87
				205			3	1		0,95	1,30	4	1,30
				232				1			1,74	1	1,74
			232	194		2	2	10	5,00	3,61	4,08	14	5,00
				205			3	6		4,59	4,67	9	4,67
				215				1			1,74	1	1,74
	Msl1	Msl1	2	7				1			1,99	1	1,99
				8			3	2		1,72	3,22	5	3,22
			7	2				1			1,99	1	1,99
			8	2			3	2		1,72	3,22	5	3,22
	Ntc20	Ntc20	85	94				1			5,31	1	5,31
			94	85				1			5,31	1	5,31
	Prp11	Prp11	11	28			2	6		4,08	11,92	8	11,92
				36				3			9,36	3	9,36
				60				1			9,75	1	9,75
				192				3			6,66	3	6,66
			28	11			2	6		4,08	11,92	8	11,92
				48				2			9,07	2	9,07
				60				1			2,84	1	2,84
				192				1			9,70	1	9,70
			36	11				3			9,36	3	9,36
				60				5			8,01	5	8,01
				126				1			3,24	1	3,24
				192				3			4,78	3	4,78
			48	28				2			9,07	2	9,07
				126				1			6,08	1	6,08
				192				2			3,54	2	3,54
			60	11				1			9,75	1	9,75
				28				1			2,84	1	2,84
				36				5			8,01	5	8,01
			103	126			6	8		3,96	9,95	14	9,95
			121	144			1			0,21		1	0,21
				173				1			2,81	1	2,81
			126	36				1			3,24	1	3,24
				48				1			6,08	1	6,08
				103			6	8		3,96	9,95	14	9,95
				144			1			0,15		1	0,15
			144	121			1			0,21		1	0,21
				126			1			0,15		1	0,15
				175			1			0,40		1	0,40
			173	121				1			2,81	1	2,81
			175	144			1			0,40		1	0,40
			192	11				3			6,66	3	6,66
				28				1			9,70	1	9,70
				36				3			4,78	3	4,78
				48				2			3,54	2	3,54
	Prp17	Prp17	121	239		4	5	6	6,28	5,94	4,87	15	6,28
			239	121		4	5	6	6,28	5,94	4,87	15	6,28
			307	366		1			0,79			1	0,79
			366	307		1			0,79			1	0,79
			404	422		13	17	7	5,19	4,49	3,07	37	5,19

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>C<sub>max</sub></sub>			Total spectral count	Best Score <sub>C<sub>max</sub></sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				427			1			0,20		1	0,20
			422	404		13	17	7	5,19	4,49	3,07	37	5,19
			427	404			1			0,20		1	0,20
				450		8	6	24	16,47	10,59	13,52	38	16,47
			450	427		8	6	24	16,47	10,59	13,52	38	16,47
	Prp19	Prp19	1	1		2			0,09			2	0,09
			107	275			2			0,53		2	0,53
			108	120		7	13	36	10,19	12,01	10,04	56	12,01
				139		4	2	1	8,19	9,46	4,06	7	9,46
				170		1	4		0,75	2,58		5	2,58
				202		1			1,74			1	1,74
				275		1			1,30			1	1,30
				404		1			1,37			1	1,37
			120	108		7	13	36	10,19	12,01	10,04	56	12,01
				135		3	3	10	2,42	3,57	5,07	16	5,07
				139			2			5,92		2	5,92
			130	139			2			6,22		2	6,22
			135	120		3	3	10	2,42	3,57	5,07	16	5,07
				139		1	1		1,67	0,39		2	1,67
				272			1	1		0,12	3,74	2	3,74
				275		1	2		1,52	0,16		3	1,52
			139	108		4	2	1	8,19	9,46	4,06	7	9,46
				120			2			5,92		2	5,92
				130			2			6,22		2	6,22
				135		1	1		1,67	0,39		2	1,67
				139			2	2		1,94	3,41	4	3,41
				275		1	1		3,68	0,16		2	3,68
			168	433				6			3,63	6	3,63
				452		2		3	0,33		1,26	5	1,26
			170	108		1	4		0,75	2,58		5	2,58
				202		6	9	3	9,23	2,56	2,87	18	9,23
				275		1			1,54			1	1,54
				452		1	1	6	1,59	3,49	4,13	8	4,13
			173	202			1			1,49		1	1,49
				229		3	5	6	7,09	6,18	5,53	14	7,09
				433		3	1	15	4,59	1,24	4,51	19	4,59
				452		3			1,90			3	1,90
				455		1	1		14,22	3,43		2	14,22
			202	108		1			1,74			1	1,74
				170		6	9	3	9,23	2,56	2,87	18	9,23
				173			1			1,49		1	1,49
				226		4	6	2	13,94	4,89	6,26	12	13,94
				229		2	5	4	2,01	8,09	8,68	11	8,68
				272		2	3	1	1,91	4,52	4,51	6	4,52
			226	202		4	6	2	13,94	4,89	6,26	12	13,94
			229	173		3	5	6	7,09	6,18	5,53	14	7,09
				202		2	5	4	2,01	8,09	8,68	11	8,68
			272	135			1	1		0,12	3,74	2	3,74
				202		2	3	1	1,91	4,52	4,51	6	4,52
			275	107			2			0,53		2	0,53
				108		1			1,30			1	1,30
				135		1	2		1,52	0,16		3	1,52
				139		1	1		3,68	0,16		2	3,68
				170		1			1,54			1	1,54
				404		1			1,22			1	1,22
			404	108		1			1,37			1	1,37
				275		1			1,22			1	1,22
				452		1			0,61			1	0,61
				455		10	7	1	1,72	2,98	1,86	18	2,98
			433	168				6			3,63	6	3,63
				173		3	1	15	4,59	1,24	4,51	19	4,59
				455		3	10	25	2,74	4,45	4,69	38	4,69
			452	168		2		3	0,33		1,26	5	1,26
				170		1	1	6	1,59	3,49	4,13	8	4,13
				173		3			1,90			3	1,90
				404		1			0,61			1	0,61
				455		1			0,08			1	0,08
			455	173		1	1		14,22	3,43		2	14,22
				404		10	7	1	1,72	2,98	1,86	18	2,98
				433		3	10	25	2,74	4,45	4,69	38	4,69
				452		1			0,08			1	0,08
	Prp2	Prp2	2	40				13			12,82	13	12,82
				43				6			10,23	6	10,23
				52				14			13,80	14	13,80
				60				12			18,06	12	18,06
				71				1			9,34	1	9,34
				75				8			14,79	8	14,79
				83				10			16,56	10	16,56
				87				3			3,67	3	3,67
				91				3			10,76	3	10,76
				101				6			11,26	6	11,26
				102				3			11,70	3	11,70
				113				3			14,59	3	14,59

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				120				5			8,80	5	8,80
				128				2			14,67	2	14,67
				133				1			3,34	1	3,34
				211				6			13,57	6	13,57
				311				3			7,66	3	7,66
				454				1			5,92	1	5,92
				560				1			4,74	1	4,74
				718				2			3,94	2	3,94
				732				8			6,84	8	6,84
				756				7			17,20	7	17,20
				820				1			3,90	1	3,90
			10	14				3			3,67	3	3,67
				45				3			7,09	3	7,09
				52				2			8,08	2	8,08
				60				1			4,28	1	4,28
				75				1			2,04	1	2,04
				87				1			6,49	1	6,49
				101				1			4,08	1	4,08
				102				3			3,09	3	3,09
				756				1			1,81	1	1,81
			14	10				3			3,67	3	3,67
				40				2			12,82	13	12,82
				45				28			11,49	28	11,49
				52		2		15	1,49		9,58	17	9,58
				87				1			2,65	1	2,65
			43	2				6			10,23	6	10,23
				52			3	11	0,82		8,87	14	8,87
				84				1			4,92	1	4,92
			45	10				3			7,09	3	7,09
				40				28			11,49	28	11,49
				60				6			12,75	6	12,75
				71				2			5,80	2	5,80
				75				2			4,02	2	4,02
				87				2			4,54	2	4,54
			52	2				14			13,80	14	13,80
				10				2			8,08	2	8,08
				40		2		15	1,49		9,58	17	9,58
				43			3	11	0,82		8,87	14	8,87
				60			8	49	12,05		9,88	57	12,05
				71			3	6	5,22		6,45	9	6,45
				75				8			8,26	8	8,26
				83				1			2,87	1	2,87
				84			1	3	0,62		5,66	4	5,66
				87				5			8,35	5	8,35
				91				3			5,24	3	5,24
				101				5			9,32	5	9,32
				102				2			7,20	2	7,20
				130				1			3,97	1	3,97
			60	718			1			1,79		1	1,79
				2				12			18,06	12	18,06
				10				1			4,28	1	4,28
				45				6			12,75	6	12,75
				52			8	49	12,05		9,88	57	12,05
				75			3	34	8,01		18,94	37	18,94
				83			1	6	1,00		9,85	7	9,85
				84				1			2,78	1	2,78
				87				5			7,52	5	7,52
				91				3			18,89	3	18,89
				101				3			3,96	3	3,96
				102			1	7	1,63		10,86	8	10,86
				113				2			6,15	2	6,15
				211				1			2,25	1	2,25
				718			1			1,82		1	1,82
				756				1			6,52	1	6,52
			71	2				1			9,34	1	9,34
				45				2			5,80	2	5,80
				52			3	6	5,22		6,45	9	6,45
				83			4	7	3,81		8,07	11	8,07
				84				4			3,69	4	3,69
				87			1	8	2,44		7,38	9	7,38
				91				6			5,36	6	5,36
				102				2			9,28	2	9,28
				137				1			2,42	1	2,42
				560				1			1,75	1	1,75
			75	718			1			0,88		1	0,88
				2				8			14,79	8	14,79
				10				1			2,04	1	2,04
				45				2			4,02	2	4,02
				52				8			8,26	8	8,26
				60			3	34	8,01		18,94	37	18,94
				84				2			9,22	2	9,22
				87				19			7,46	19	7,46
				91			2	11	3,86		9,65	13	9,65

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				101				5			6,24	5	6,24
				102				2			12,54	2	12,54
				120				2			8,13	2	8,13
				128				1			2,49	1	2,49
				130				1			1,92	1	1,92
				756				3			5,75	3	5,75
			83	2				10			16,56	10	16,56
				52				1			2,87	1	2,87
				60			1	6	1,00		9,85	7	9,85
				71			4	7	3,81		8,07	11	8,07
				87			3	47	5,82		10,73	50	10,73
				91			1	22	8,15		14,13	23	14,13
				101				9			6,84	9	6,84
				102				8			14,02	8	14,02
				113				2			1,82	2	1,82
				130				4			6,05	4	6,05
				137				2			4,51	2	4,51
				211				1			3,67	1	3,67
				718			1		0,95			1	0,95
				756				1			3,86	1	3,86
			84	43				1			4,92	1	4,92
				52			1	3	0,62		5,66	4	5,66
				60				1			2,78	1	2,78
				71				4			3,69	4	3,69
				75				2			9,22	2	9,22
				91			1		1,71			1	1,71
				101			1	10	0,64		14,24	11	14,24
				102				4			2,53	4	2,53
				128				1			3,59	1	3,59
				137				1			4,46	1	4,46
				211				1			10,64	1	10,64
			87	2				3			3,67	3	3,67
				10				1			6,49	1	6,49
				40				1			2,65	1	2,65
				45				2			4,54	2	4,54
				52				5			8,35	5	8,35
				60				5			7,52	5	7,52
				71			1	8	2,44		7,38	9	7,38
				75				19			7,46	19	7,46
				83			3	47	5,82		10,73	50	10,73
				101			2	10	3,21		8,67	12	8,67
				102				13			8,10	13	8,10
				113				1			4,56	1	4,56
				120				2			4,07	2	4,07
				128				2			8,92	2	8,92
				130				1			4,39	1	4,39
				211				2			8,33	2	8,33
				756				1			5,21	1	5,21
			91	2				3			10,76	3	10,76
				52				3			5,24	3	5,24
				60				3			18,89	3	18,89
				71				6			5,36	6	5,36
				75			2	11	3,86		9,65	13	9,65
				83			1	22	8,15		14,13	23	14,13
				84			1		1,71			1	1,71
				102			2	38	4,76		24,32	40	24,32
				113				6			10,94	6	10,94
				120				1			7,13	1	7,13
				128				1			2,94	1	2,94
				130				1			1,56	1	1,56
				133				2			4,48	2	4,48
				756				2			6,74	2	6,74
			101	2				6			11,26	6	11,26
				10				1			4,08	1	4,08
				52				5			9,32	5	9,32
				60				3			3,96	3	3,96
				75				5			6,24	5	6,24
				83				9			6,84	9	6,84
				84			1	10	0,64		14,24	11	14,24
				87			2	10	3,21		8,67	12	8,67
				113			1	6	0,28		5,95	7	5,95
				120			1	2	1,17		5,59	3	5,59
				128			1	1	1,99		6,88	2	6,88
				130				8			4,46	8	4,46
				133				12			10,63	12	10,63
				137				11			7,91	11	7,91
				454				1			2,37	1	2,37
				560				2			4,85	2	4,85
				718			1		1,08			1	1,08
				732				4			7,01	4	7,01
				756				1			3,76	1	3,76
			102	2				3			11,70	3	11,70
				10				3			3,09	3	3,09

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total	Best
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	spectral count	Score <sub>max</sub>
				52				2			7,20	2	7,20
				60				7	1,63		10,86	8	10,86
				71		1		2			9,28	2	9,28
				75				2			12,54	2	12,54
				83				8			14,02	8	14,02
				84				4			2,53	4	2,53
				87				13			8,10	13	8,10
				91		2		38	4,76		24,32	40	24,32
				120				18			12,55	18	12,55
				128		1		2	1,45		4,50	3	4,50
				130		1		4	0,49		2,61	5	2,61
				133				2			5,63	2	5,63
				137				5			5,65	5	5,65
				211				2			11,21	2	11,21
				732				2			4,71	2	4,71
		113		2				3			14,59	3	14,59
				60				2			6,15	2	6,15
				83				2			1,82	2	1,82
				87				1			4,56	1	4,56
				91				6			10,94	6	10,94
				101		1		6	0,28		5,95	7	5,95
				128		1		5	0,61		6,01	6	6,01
				130				5			2,45	5	2,45
				133				9			7,71	9	7,71
				137				1			3,87	1	3,87
				718				1			2,65	1	2,65
				732				1			1,77	1	1,77
		120		2				5			8,80	5	8,80
				75				2			8,13	2	8,13
				87				2			4,07	2	4,07
				91				1			7,13	1	7,13
				101		1		2	1,17		5,59	3	5,59
				102				18			12,55	18	12,55
				130		1			0,64			1	0,64
				133		1		2	4,37		4,22	3	4,37
				137		1		2	0,12		1,69	3	1,69
				211				1			5,08	1	5,08
				756				2			6,73	2	6,73
		128		2				2			14,67	2	14,67
				75				1			2,49	1	2,49
				84				1			3,59	1	3,59
				87				2			8,92	2	8,92
				91				1			2,94	1	2,94
				101		1		1	1,99		6,88	2	6,88
				102		1		2	1,45		4,50	3	4,50
				113		1		5	0,61		6,01	6	6,01
				133		6		15	6,32		7,13	21	7,13
				137		1		11	2,73		5,82	12	5,82
		130		52				1			3,97	1	3,97
				75				1			1,92	1	1,92
				83				4			6,05	4	6,05
				87				1			4,39	1	4,39
				91				1			1,56	1	1,56
				101				8			4,46	8	4,46
				102		1		4	0,49		2,61	5	2,61
				113				5			2,45	5	2,45
				120		1			0,64			1	0,64
				137		3		9	5,88		4,22	12	5,88
				211				9			5,07	9	5,07
				560				1			3,67	1	3,67
				820				1			3,03	1	3,03
		133		2				1			3,34	1	3,34
				91				2			4,48	2	4,48
				101				12			10,63	12	10,63
				102				2			5,63	2	5,63
				113				9			7,71	9	7,71
				120		1		2	4,37		4,22	3	4,37
				128		6		15	6,32		7,13	21	7,13
				211				2			9,86	2	9,86
				718				1			3,98	1	3,98
				820				1			2,61	1	2,61
		137		71				1			2,42	1	2,42
				83				2			4,51	2	4,51
				84				1			4,46	1	4,46
				101				11			7,91	11	7,91
				102				5			5,65	5	5,65
				113				1			3,87	1	3,87
				120		1		2	0,12		1,69	3	1,69
				128		1		11	2,73		5,82	12	5,82
				130		3		9	5,88		4,22	12	5,88
				211				3			5,38	3	5,38
				454				6			3,78	6	3,78
				467				1			2,10	1	2,10



Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
								2			1,97	2	1,97
						1			2,09			1	2,09
								1			4,63	1	4,63
								1			2,10	1	2,10
			211					6			13,57	6	13,57
								1			2,25	1	2,25
								1			3,67	1	3,67
								1			10,64	1	10,64
								2			8,33	2	8,33
								2			11,21	2	11,21
								1			5,08	1	5,08
								9			5,07	9	5,07
								2			9,86	2	9,86
								3			5,38	3	5,38
						14		11	10,43		9,69	25	10,43
								2			6,47	2	6,47
						1		1	5,48		1,33	2	5,48
						1		3	0,29		4,27	4	4,27
								1			3,80	1	3,80
			221			14		11	10,43		9,69	25	10,43
								7			3,20	7	3,20
			300		10,5	17		96	12,63		8,36	113	12,63
					5,1	18		61	11,21		8,08	79	11,21
			311					3			7,66	3	7,66
								2			6,47	2	6,47
					10,5	17		96	12,63		8,36	113	12,63
					15,3	19		32	10,39		7,35	51	10,39
			316		10,5	7		7			3,20	7	3,20
					5,1	18		61	11,21		8,08	79	11,21
			454					1			5,92	1	5,92
								1			2,37	1	2,37
								6			3,78	6	3,78
			467					1			2,10	1	2,10
						1		1	5,48		1,33	2	5,48
			485					2			1,97	2	1,97
					20,5			1			2,31	1	2,31
					19,4	4		18	3,26		3,88	22	3,88
			560					1			4,74	1	4,74
								1			1,75	1	1,75
								2			4,85	2	4,85
								1			3,67	1	3,67
						1		3	0,29		4,27	4	4,27
			632		17,0			14			9,06	14	9,06
			640		17,0			14			9,06	14	9,06
					13,8	1		10	10,69		5,47	11	10,69
					22,0	3		58	4,80		12,53	61	12,53
			718					2			3,94	2	3,94
						1			1,79			1	1,79
						1			1,82			1	1,82
						1			0,88			1	0,88
						1			0,95			1	0,95
						1			1,08			1	1,08
								1			2,65	1	2,65
								1			3,98	1	3,98
						1			2,09			1	2,09
			728		20,5			1			2,31	1	2,31
			732					8			6,84	8	6,84
								4			7,01	4	7,01
								2			4,71	2	4,71
								1			1,77	1	1,77
								1			4,63	1	4,63
					15,3	19		32	10,39		7,35	51	10,39
					19,4	4		18	3,26		3,88	22	3,88
			750		13,8	1		10	10,69		5,47	11	10,69
			756					7			17,20	7	17,20
								1			1,81	1	1,81
								1			6,52	1	6,52
								3			5,75	3	5,75
								1			3,86	1	3,86
								1			5,21	1	5,21
								2			6,74	2	6,74
								1			3,76	1	3,76
								2			6,73	2	6,73
								1			3,80	1	3,80
					22,0	3		58	4,80		12,53	61	12,53
					14,1	2		40	9,09		12,10	42	12,10
			763		14,1	2		40	9,09		12,10	42	12,10
			820					1			3,90	1	3,90
								1			3,03	1	3,03
								1			2,61	1	2,61
								1			2,10	1	2,10
								1			2,40	1	2,40
			828					1			1,73	1	1,73

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			840	820				1			2,40	1	2,40
			870	828				1			1,73	1	1,73
	Prp21	Prp21				44	68	224	20,67	13,04	17,06	336	20,67
	Prp45	Prp45	60	71	16,5	4	4	22	4,27	2,96	8,71	30	8,71
			71	60	16,5	4	4	22	4,27	2,96	8,71	30	8,71
			242	265				1			3,28	1	3,28
			262	265		22	12	60	16,56	13,76	15,33	94	16,56
				274		15	2	6	16,38	4,84	11,87	23	16,38
			264	274		11	2	5	11,70	5,32	9,86	18	11,70
			265	242				1			3,28	1	3,28
				262		22	12	60	16,56	13,76	15,33	94	16,56
				274		24	14	43	11,26	12,12	13,33	81	13,33
				287				1			6,89	1	6,89
			274	262		15	2	6	16,38	4,84	11,87	23	16,38
				264		11	2	5	11,70	5,32	9,86	18	11,70
				265		24	14	43	11,26	12,12	13,33	81	13,33
				287		5	4	9	11,49	6,89	9,14	18	11,49
			287	265				1			6,89	1	6,89
				274		5	4	9	11,49	6,89	9,14	18	11,49
	Prp46	Prp46	56	67		4	3	7	11,92	5,84	12,61	14	12,61
				87		2		2	4,54		10,59	4	10,59
			66	88		2			5,10			2	5,10
			67	56		4	3	7	11,92	5,84	12,61	14	12,61
				88		4			5,27			4	5,27
			87	56		2		2	4,54		10,59	4	10,59
				100		1			3,30			1	3,30
				434				1			7,51	1	7,51
			88	66		2			5,10			2	5,10
				67		4			5,27			4	5,27
				434				2			8,97	2	8,97
			100	87		1			3,30			1	3,30
			130	427	5,6	1			1,68			1	1,68
			319	409	12,6	2	2	1	3,03	2,00	4,05	5	4,05
			409	319	12,6	2	2	1	3,03	2,00	4,05	5	4,05
				427	14,2		3				2,81	3	2,81
			427	130	5,6	1			1,68			1	1,68
				409	14,2		3				2,81	3	2,81
			434	87				1			7,51	1	7,51
				88				2			8,97	2	8,97
	Prp8	Prp8	89	96		1		3	1,18		2,86	4	2,86
			90	98		10	10	44	11,94	5,37	8,84	64	11,94
				103			3	3		7,29	8,18	6	8,18
			96	89		1		3	1,18		2,86	4	2,86
				98		10	12	5	9,77	5,19	5,53	27	9,77
				103			5			3,04		5	3,04
			98	90		10	10	44	11,94	5,37	8,84	64	11,94
				96		10	12	5	9,77	5,19	5,53	27	9,77
			103	90			3	3		7,29	8,18	6	8,18
				96			5			3,04		5	3,04
				121				1			0,41	1	0,41
				611				3			1,40	3	1,40
			121	103				1			0,41	1	0,41
			131	141	19,0			2			6,72	2	6,72
			141	131	19,0			2			6,72	2	6,72
			152	159	14,2		1			2,84		1	2,84
			159	152	14,2		1			2,84		1	2,84
				555	14,3			2			4,98	2	4,98
				586	12,2		1	10		6,63	11,62	11	11,62
				600	23,5		1			0,46		1	0,46
			325	334	13,8	1	3	4	3,20	7,63	6,84	8	7,63
			334	325	13,8	1	3	4	3,20	7,63	6,84	8	7,63
			351	519	13,2	1			2,41			1	2,41
				524	8,9	1	4	2	0,72	2,53	3,46	7	3,46
			517	524	10,5		2			0,76		2	0,76
				681	10,8		1	2		0,03	5,56	3	5,56
				684	11,3	32	39	14	17,30	11,19	12,75	85	17,30
				697	16,6	7	8	1	14,38	10,61	6,39	16	14,38
			519	351	13,2	1			2,41			1	2,41
			524	351	8,9	1	4	2	0,72	2,53	3,46	7	3,46
				517	10,5		2			0,76		2	0,76
			555	159	14,3			2			4,98	2	4,98
			586	159	12,2		1	10		6,63	11,62	11	11,62
				612	8,2		1			0,76		1	0,76
				743	24,3	4	19	37	4,97	4,66	8,41	60	8,41
			600	159	23,5		1			0,46		1	0,46
				611	15,4		4			0,86		4	0,86
				743	34,6		3			0,71		3	0,71
			608	612	6,9			1			3,91	1	3,91
			611	103				3			1,40	3	1,40
				600	15,4		4			0,86		4	0,86
			612	586	8,2		1			0,76		1	0,76
				608	6,9			1			3,91	1	3,91
			681	517	10,8		1	2		0,03	5,56	3	5,56

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			684	517	11,3	32	39	14	17,30	11,19	12,75	85	17,30
				697	13,9	5	21	8	7,47	8,93	9,86	34	9,86
			697	517	16,6	7	8	1	14,38	10,61	6,39	16	14,38
				684	13,9	5	21	8	7,47	8,93	9,86	34	9,86
				1926	24,8	1			0,85			1	0,85
			743	586	24,3	4	19	37	4,97	4,66	8,41	60	8,41
				600	34,6		3			0,71		3	0,71
				847	23,9		1	3		4,19	6,45	4	6,45
			747	847	13,7		1	3		1,66	4,97	4	4,97
			794	819	10,7		14	4		15,35	14,19	18	15,35
				847	13,1		7	3		2,50	3,65	10	3,65
				1093	10,5		9	10		14,53	11,74	19	14,53
			810	817	10,7	1	14	15	3,52	3,42	4,05	30	4,05
			817	810	10,7	1	14	15	3,52	3,42	4,05	30	4,05
			819	794	10,7		14	4		15,35	14,19	18	15,35
				847	15,5		9	2		2,71	2,90	11	2,90
			842	847	8,6		2			2,62		2	2,62
				1334	17,8		1	7		1,19	6,49	8	6,49
			846	1093	15,2		1	1		0,14	3,04	2	3,04
			847	743	23,9		1	3		4,19	6,45	4	6,45
				747	13,7		1	3		1,66	4,97	4	4,97
				794	13,1		7	3		2,50	3,65	10	3,65
				819	15,5		9	2		2,71	2,90	11	2,90
				842	8,6		2			2,62		2	2,62
				858	16,6		4	4		2,10	5,81	8	5,81
				1093	14,5	1	16	42	4,29	4,49	6,79	59	6,79
			858	847	16,6		4	4		2,10	5,81	8	5,81
			920	1589	25,2			6			11,44	6	11,44
			926	1330	16,4			2			2,13	2	2,13
			956	965	15,3		1	9		7,59	8,31	10	8,31
			965	956	15,3		1	9		7,59	8,31	10	8,31
			1093	794	10,5		9	10		14,53	11,74	19	14,53
				846	15,2		1	1		0,14	3,04	2	3,04
				847	14,5	1	16	42	4,29	4,49	6,79	59	6,79
			1150	1294	17,6			3			4,68	3	4,68
			1205	1310	14,1	4	5	6	3,84	7,76	5,90	15	7,76
				1416	29,2		1	3		0,73	3,40	4	3,40
			1209	1416	23,0			7			4,45	7	4,45
			1294	1150	17,6			3			4,68	3	4,68
			1310	1205	14,1	4	5	6	3,84	7,76	5,90	15	7,76
			1330	926	16,4			2			2,13	2	2,13
			1334	842	17,8		1	7		1,19	6,49	8	6,49
			1416	1205	29,2		1	3		0,73	3,40	4	3,40
				1209	23,0			7			4,45	7	4,45
			1589	920	25,2			6			11,44	6	11,44
			1807	1938	27,3			6			11,77	6	11,77
				2080		1	1	3	1,57	4,98	10,34	5	10,34
				2089				3			6,25	3	6,25
			1821	2089			2	1		2,04	9,85	3	9,85
				2097				1			6,01	1	6,01
			1864	1903	23,2			2			9,16	2	9,16
				2016	20,0			2			8,28	2	8,28
				2108				3			5,03	3	5,03
				2122		3	1	39	9,51	0,36	12,14	43	12,14
			1873	1903	13,7		1	6		2,31	5,25	7	5,25
				2122				3			8,01	3	8,01
			1892	1910	13,5		1			0,12		1	0,12
				1912	11,2		2			3,97		2	3,97
			1903	1864	23,2			2			9,16	2	9,16
				1873	13,7		1	6		2,31	5,25	7	5,25
				1910	13,0	1	5		5,80	5,02		6	5,80
				2122		1	1	2	6,77	0,79	6,25	4	6,77
			1910	1892	13,5		1			0,12		1	0,12
				1903	13,0	1	5		5,80	5,02		6	5,80
				1938	10,5	1	4	10	6,36	4,60	4,92	15	6,36
				2094				1			2,66	1	2,66
				2097				1			2,86	1	2,86
				2108		1	3	4	0,68	1,28	2,72	8	2,72
				2122		2	1	15	2,18	2,25	6,80	18	6,80
				2149	27,0			1			2,68	1	2,68
			1912	1892	11,2		2			3,97		2	3,97
			1926	697	24,8	1			0,85			1	0,85
			1938	1807	27,3			6			11,77	6	11,77
				1910	10,5	1	4	10	6,36	4,60	4,92	15	6,36
				2016	20,2			2			9,82	2	9,82
				2089		1	1	7	0,97	1,24	8,39	9	8,39
				2094				4			4,70	4	4,70
				2097				3			8,74	3	8,74
			2016	1864	20,0			2			8,28	2	8,28
				1938	20,2			2			9,82	2	9,82
				2066	13,6	37	22	181	10,94	10,87	13,52	240	13,52
				2089		14	17	51	10,35	7,92	10,17	82	10,35
				2094		13	5	19	13,88	2,39	9,90	37	13,88

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				2097		7	8	53	8,40	9,47	15,21	68	15,21
				2108				50			13,74	50	13,74
				2122		13	5	176	13,68	10,45	18,77	194	18,77
				2124			1	27		1,46	10,09	28	10,09
			2066	2016	13,6	37	22	181	10,94	10,87	13,52	240	13,52
				2089		3	5	1	16,26	10,47	4,79	9	16,26
				2094				1			1,43	1	1,43
				2097		1	1	3	5,68	3,12	9,49	5	9,49
				2108				1			12,86	1	12,86
				2122				3			7,78	3	7,78
			2080	1807		1	1	3	1,57	4,98	10,34	5	10,34
				2094			1			0,52		1	0,52
			2089	1807				3			6,25	3	6,25
				1821			2	1		2,04	9,85	3	9,85
				1938		1	1	7	0,97	1,24	8,39	9	8,39
				2016		14	17	51	10,35	7,92	10,17	82	10,35
				2066		3	5	1	16,26	10,47	4,79	9	16,26
				2097		3	4	6	3,76	4,85	6,46	13	6,46
			2094	1910				1			2,66	1	2,66
				1938				4			4,70	4	4,70
				2016		13	5	19	13,88	2,39	9,90	37	13,88
				2066				1			1,43	1	1,43
				2080			1			0,52		1	0,52
				2097		1	2	3	2,50	2,28	3,09	6	3,09
				2108				1			2,58	1	2,58
				2122				3			3,48	3	3,48
			2097	1821				1			6,01	1	6,01
				1910				1			2,86	1	2,86
				1938				3			8,74	3	8,74
				2016		7	8	53	8,40	9,47	15,21	68	15,21
				2066		1	1	3	5,68	3,12	9,49	5	9,49
				2089		3	4	6	3,76	4,85	6,46	13	6,46
				2094		1	2	3	2,50	2,28	3,09	6	3,09
				2108			3	14		8,71	13,41	17	13,41
				2154				3			8,11	3	8,11
			2108	1864				3			5,03	3	5,03
				1910		1	3	4	0,68	1,28	2,72	8	2,72
				2016				50			13,74	50	13,74
				2066				1			12,86	1	12,86
				2094				1			2,58	1	2,58
				2097			3	14		8,71	13,41	17	13,41
				2154		1		4	0,40		12,04	5	12,04
			2122	1864		3	1	39	9,51	0,36	12,14	43	12,14
				1873				3			8,01	3	8,01
				1903		1	1	2	6,77	0,79	6,25	4	6,77
				1910		2	1	15	2,18	2,25	6,80	18	6,80
				2016		13	5	176	13,68	10,45	18,77	194	18,77
				2066				3			7,78	3	7,78
				2094				3			3,48	3	3,48
				2154				1			5,88	1	5,88
			2124	2016			1	27		1,46	10,09	28	10,09
			2149	1910	27,0			1			2,68	1	2,68
				2154	11,1			1			3,72	1	3,72
			2154	2097				3			8,11	3	8,11
				2108		1		4	0,40		12,04	5	12,04
				2122				1			5,88	1	5,88
				2149	11,1			1			3,72	1	3,72
	Prp9	Prp9		2	115			9			8,22	9	8,22
				89	140		3	21		7,09	12,66	24	12,66
				95	107			8			5,74	8	5,74
				107	95			8			5,74	8	5,74
				115	115	19	18	106	15,02	10,77	15,60	143	15,60
				115	2			9			8,22	9	8,22
				107	107	19	18	106	15,02	10,77	15,60	143	15,60
				124	124	1	3	16	7,42	17,05	11,60	20	17,05
			124	115		1	3	16	7,42	17,05	11,60	20	17,05
				140	89		3	21		7,09	12,66	24	12,66
				278	290			1			5,55	1	5,55
				290	278			1			5,55	1	5,55
				302	306	3	2	8	2,17	0,36	4,48	13	4,48
				306	302	3	2	8	2,17	0,36	4,48	13	4,48
				468	492			1			2,75	1	2,75
				492	468			1			2,75	1	2,75
				519	519	7	2	35	14,33	4,31	10,25	44	14,33
				518	525			3			11,09	3	11,09
				519	492	7	2	35	14,33	4,31	10,25	44	14,33
				526	526		1			1,71		1	1,71
				525	518			3			11,09	3	11,09
				526	519		1			1,71		1	1,71
	Rse1	Rse1		172	221	11,9		2			16,26	2	16,26
					1269			1			2,32	1	2,32
			221	172	11,9			2			16,26	2	16,26
				1269				1			9,63	1	9,63

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			347	462				1			7,93	1	7,93
			352	462		2			6,88			2	6,88
			361	948	41,6	2			4,89			2	4,89
				949	40,2		1	1		0,77	2,39	2	2,39
			462	347				1			7,93	1	7,93
				352		2			6,88			2	6,88
			948	361	41,6	2			4,89			2	4,89
			949	361	40,2		1	1		0,77	2,39	2	2,39
				1001	32,1	4	6	15	4,50	5,93	6,24	25	6,24
			1001	949	32,1	4	6	15	4,50	5,93	6,24	25	6,24
			1007	1057	13,9	1	1	2	4,79	1,61	6,13	4	6,13
			1057	1007	13,9	1	1	2	4,79	1,61	6,13	4	6,13
			1269	172				1			2,32	1	2,32
				221				1			9,63	1	9,63
			1316	1342			13	3		14,76	21,63	16	21,63
			1342	1316			13	3		14,76	21,63	16	21,63
	SmB	SmB	2	100				1			10,51	1	10,51
			19	100	5,7			2			3,05	2	3,05
			55	76	8,7	8	12	40	6,64	3,56	11,39	60	11,39
			60	65		4	4	7	4,30	3,31	5,84	15	5,84
				68		2	3	1	1,37	5,46	4,25	6	5,46
				76		25	18	71	9,06	11,00	15,56	114	15,56
			65	60		4	4	7	4,30	3,31	5,84	15	5,84
				76		1	1	4	1,71	2,16	3,38	6	3,38
			68	60		2	3	1	1,37	5,46	4,25	6	5,46
			76	55	8,7	8	12	40	6,64	3,56	11,39	60	11,39
				60		25	18	71	9,06	11,00	15,56	114	15,56
				65		1	1	4	1,71	2,16	3,38	6	3,38
				100	25,9			5			3,05	5	3,05
				186				1			0,89	1	0,89
			100	2				1			10,51	1	10,51
				19	5,7			2			3,05	2	3,05
				76	25,9		5				3,05	5	3,05
				117				4			2,62	4	2,62
				186				1			4,81	1	4,81
			105	117			1	3		3,86	3,45	4	3,86
			114	117				1			3,62	1	3,62
				121				4			4,11	4	4,11
			117	100				4			2,62	4	2,62
				105			1	3		3,86	3,45	4	3,86
				114				1			3,62	1	3,62
				124				4			2,96	4	2,96
				138				3			4,67	3	4,67
			121	114				4			4,11	4	4,11
				127				5			5,72	5	5,72
				131				1			3,87	1	3,87
				138				1			1,87	1	1,87
			124	117				4			2,96	4	2,96
				138			2			0,87		2	0,87
				186			1			0,43		1	0,43
			127	121				5			5,72	5	5,72
			131	121				1			3,87	1	3,87
				138		2	6	16	4,95	3,88	6,45	24	6,45
				186				2			5,10	2	5,10
			132	138		2	5	6	1,64	0,84	3,47	13	3,47
				186			1			1,00		1	1,00
			138	117				3			4,67	3	4,67
				121				1			1,87	1	1,87
				124			2			0,87		2	0,87
				131		2	6	16	4,95	3,88	6,45	24	6,45
				132		2	5	6	1,64	0,84	3,47	13	3,47
				186		1	3	7	3,47	5,07	7,22	11	7,22
				194				1			2,88	1	2,88
			145	186		1	1	5	0,24	1,08	8,93	7	8,93
				186			1			0,89		1	0,89
				100				1			4,81	1	4,81
				124			1			0,43		1	0,43
				131				2			5,10	2	5,10
				132				1		1,00		1	1,00
				138		1	3	7	3,47	5,07	7,22	11	7,22
				145		1	1	5	0,24	1,08	8,93	7	8,93
	SmD1	SmD1	194	138				1			2,88	1	2,88
			1	111				1			7,56	1	7,56
				2				1			10,15	1	10,15
				128			1			0,40		1	0,40
			8	111		1	1	9	0,72	2,50	6,04	11	6,04
				128				3			7,32	3	7,32
				129				1			2,81	1	2,81
				140				1			1,87	1	1,87
				9				3			8,18	3	8,18
				129				1			7,12	1	7,12
				111				1			7,56	1	7,56
				2				1			10,15	1	10,15

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
				8		1	1	9	0,72	2,50	6,04	11	6,04
				128				4		5,45	7,08	14	7,08
				140				1		0,16	3,04	3	3,04
			128	2				1		0,40		1	0,40
				8				3			7,32	3	7,32
				9				3			8,18	3	8,18
				111			4	10		5,45	7,08	14	7,08
				140				37		6,31	12,00	62	12,00
			129	8		7	18	1	4,55		2,81	1	2,81
				9				1			7,12	1	7,12
			140	8				1			1,87	1	1,87
				111			1	2		0,16	3,04	3	3,04
				128		7	18	37	4,55	6,31	12,00	62	12,00
	SmD2	SmD2	53	59	17,5			10		6,35		10	6,35
				73	8,0	11	35	4	6,78	6,85	5,79	50	6,85
				79	15,6			1		0,17		1	0,17
			59	53	17,5			10		6,35		10	6,35
				73	14,7			3		2,22		3	2,22
				79	31,5			4		1,61		4	1,61
				82	38,7			1		2,37		1	2,37
				93	9,7	1	4	1	3,38	6,61	6,73	6	6,73
			73	53	8,0	11	35	4	6,78	6,85	5,79	50	6,85
				59	14,7			3		2,22		3	2,22
				79	15,6			1		0,17		1	0,17
				59	31,5			4		1,61		4	1,61
				82	7,8	3	8	12	9,75	7,33	9,77	23	9,77
			82	59	38,7			1		2,37		1	2,37
				79	7,8	3	8	12	9,75	7,33	9,77	23	9,77
				93	33,8			1		2,75		1	2,75
			93	59	9,7	1	4	1	3,38	6,61	6,73	6	6,73
				82	33,8			1		2,75		1	2,75
	SmD3	SmD3	2	85		2	2	7	11,37	3,17	5,24	11	11,37
				86		2	3	12	1,53	4,23	4,37	17	4,37
			9	85	13,0			1			3,31	1	3,31
				86				2			2,13	2	2,13
			79	86		1		1	0,24		1,67	2	1,67
			85	2		2	2	7	11,37	3,17	5,24	11	11,37
				9	13,0			1			3,31	1	3,31
			86	2		2	3	12	1,53	4,23	4,37	17	4,37
				9				2			2,13	2	2,13
	SmG	SmG	8	13	10,0	1		1	0,24		1,67	2	1,67
				13	8	2	5	23	4,60	4,73	5,69	30	5,69
				14	24	2	5	23	4,60	4,73	5,69	30	5,69
			24	24	13,0	2	2	3	6,97	11,25	12,31	7	12,31
				14	13,0	2	2	3	6,97	11,25	12,31	7	12,31
	Snt309	Snt309	46	48				3		1,72		3	1,72
			48	46				3		1,72		3	1,72
			67	94		2	3	8	4,52	1,90	3,38	13	4,52
			72	94				1			0,61	1	0,61
			94	67		2	3	8	4,52	1,90	3,38	13	4,52
				72				1			0,61	1	0,61
	Snu114	Snu114	59	72				1		0,91		1	0,91
			60	81				3		5,77		3	5,77
			72	59				1		0,91		1	0,91
			81	60				3		5,77		3	5,77
			99	111				1		1,75		1	1,75
				494		2	5	15	4,52	7,48	6,92	22	7,48
			111	99				1		1,75		1	1,75
			115	159	6,1		3	1		1,76	3,29	4	3,29
			159	115	6,1		3	1		1,76	3,29	4	3,29
			494	99		2	5	15	4,52	7,48	6,92	22	7,48
				581	14,0	1	3	9	1,83	5,39	14,42	13	14,42
			520	583	15,2			1			2,21	1	2,21
			558	581	15,1			1			2,51	1	2,51
			581	494	14,0	1	3	9	1,83	5,39	14,42	13	14,42
				558	15,1			1			2,51	1	2,51
			583	520	15,2			1			2,21	1	2,21
			617	665	9,5	2	2	6	2,29	3,34	4,49	10	4,49
			665	617	9,5	2	2	6	2,29	3,34	4,49	10	4,49
			730	749				2		0,50	3,11	6	3,11
				890		1	3	4	1,96	1,07		4	1,96
			749	730				2		0,50	3,11	6	3,11
			804	843	10,2	3	1		1,35	0,60		4	1,35
			843	804	10,2	3	1		1,35	0,60		4	1,35
				991	17,0	1	1	3	0,36	1,97	2,28	5	2,28
			890	730		1	3		1,96	1,07		4	1,96
			947	955	18,0			4			4,69	4	4,69
			955	947	18,0			4			4,69	4	4,69
			991	843	17,0	1	1	3	0,36	1,97	2,28	5	2,28
	Snu17/1st3	Snu17/1st3	96	103		4	3	7	10,92	7,53	10,43	14	10,92
			103	96		4	3	7	10,92	7,53	10,43	14	10,92
			123	133	17,9	2		30	0,60		9,88	32	9,88
				138				1			2,41	1	2,41

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total	Best
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	spectral count	Score <sub>max</sub>
			133	123	17,9	2		30	0,60		9,88	32	9,88
				143		2	4		2,87	2,22		6	2,87
			138	123				1			2,41	1	2,41
				144			2			0,88		2	0,88
			143	133		2	4		2,87	2,22		6	2,87
			144	138			2			0,88		2	0,88
	Spp2	Spp2	7	15		1			7,65			1	7,65
			11	15		1			0,59			1	0,59
			15	7		1			7,65			1	7,65
				11		1			0,59			1	0,59
			38	52				3			13,55	3	13,55
				58				1			7,55	1	7,55
				68				1			3,42	1	3,42
				74				1			9,31	1	9,31
				83				2			4,37	2	4,37
				95				1			5,46	1	5,46
			52	38				3			13,55	3	13,55
			58	38				1			7,55	1	7,55
			68	38				1			3,42	1	3,42
				70				9			17,04	9	17,04
			70	68				9			17,04	9	17,04
				133				1			2,95	1	2,95
			74	38				1			9,31	1	9,31
			82	95				4			3,94	4	3,94
			83	38				2			4,37	2	4,37
			95	38				1			5,46	1	5,46
				82				4			3,94	4	3,94
			124	133				1			0,10	1	0,10
			127	133				4			7,30	4	7,30
			133	70				1			2,95	1	2,95
				124				1			0,10	1	0,10
				127				4			7,30	4	7,30
				154				1			13,98	1	13,98
			154	133				1			13,98	1	13,98
			168	181				2			2,64	2	2,64
			181	168				2			2,64	2	2,64
			192	367				1			4,84	1	4,84
	Syf1	Syf1	220	249		2	3		5,33	5,17		8	5,33
			249	220		2	3		5,33	5,17		8	5,33
			367	192				1			4,84	1	4,84
			413	419	10,4	2	5		3,53	3,25		14	5,41
				424	21,1		1			0,40		1	0,40
			419	413	10,4	2	5		3,53	3,25	5,41	14	5,41
			424	413	21,1		1			0,40		1	0,40
				439				1			2,72	1	2,72
			439	424				1			2,72	1	2,72
				531		9	3	23	9,89	6,16	9,55	35	9,89
			524	531		8	4	6	4,68	4,30	15,22	18	15,22
			531	439		9	3	23	9,89	6,16	9,55	35	9,89
				524		8	4	6	4,68	4,30	15,22	18	15,22
			770	802				4			1,78	4	1,78
			790	798				2			5,42	2	5,42
			798	790				2			5,42	2	5,42
			802	770				4			1,78	4	1,78
	Syf2	Syf2	23	26		9	11	16	3,47	6,27	8,99	36	8,99
			26	23		9	11	16	3,47	6,27	8,99	36	8,99
			121	159				2			5,88	2	5,88
			132	142				1			1,66	1	1,66
			136	142				4			4,15	4	4,15
				145				1			3,27	1	3,27
			142	132				1			1,66	1	1,66
				136				4			4,15	4	4,15
			145	136				1			3,27	1	3,27
				151		11	4	8	5,16	3,30	4,10	23	5,16
			151	145		11	4	8	5,16	3,30	4,10	23	5,16
			159	121				2			5,88	2	5,88
			199	206		2	2	4	0,86	0,65	4,86	8	4,86
			206	199		2	2	4	0,86	0,65	4,86	8	4,86
	Yju2/Cwc16	Yju2/Cwc16	5	68				1			3,01	1	3,01
			22	26		1		1	1,17		2,07	2	2,07
			26	22		1		1	1,17		2,07	2	2,07
			32	68				2			2,62	2	2,62
			36	68		3	7	8	5,78	3,70	6,46	18	6,46
				74				4			3,95	4	3,95
				80		1	4		0,96	2,88		5	2,88
			60	120		2	2	5	3,33	1,27	8,10	9	8,10
			63	68		1	2	2	3,05	4,29	5,41	5	5,41
			68	5				1			3,01	1	3,01
				32				2			2,62	2	2,62
			36	68		3	7	8	5,78	3,70	6,46	18	6,46
				74		1	2	2	3,05	4,29	5,41	5	5,41
				80				1			1,18	1	1,18
				80		18	9	20	14,57	3,40	6,29	47	14,57

Type	Protein 1	Protein 2	Residue 1	Residue 2	Å	Spectral count			Score <sub>max</sub>			Total spectral count	Best Score <sub>max</sub>
						Set 1	Set 2	Set 3	Set 1	Set 2	Set 3		
			74	36			4			3,95		4	3,95
				68			1			1,18		1	1,18
			80	36		1	4		0,96	2,88		5	2,88
				68		18	9	20	14,57	3,40	6,29	47	14,57
			120	60		2	2	5	3,33	1,27	8,10	9	8,10
			168	172		2			2,42			2	2,42
			172	168		2			2,42			2	2,42
			242	253		1			2,43			1	2,43
			253	242		1			2,43			1	2,43
				259		1	4	4	8,00	5,45	6,27	9	8,00
			255	259			1	1		1,22	2,43	2	2,43
			259	253		1	4	4	8,00	5,45	6,27	9	8,00
				255			1	1		1,22	2,43	2	2,43
			272	275			1	1		0,24	6,37	2	6,37
			275	272			1	1		0,24	6,37	2	6,37
Ysf3		Ysf3	12	17	7,9		3			1,89		3	1,89
			17	12	7,9		3			1,89		3	1,89



**Table S3: MolProbity validation of the final RNA model of the yeast B<sup>act</sup> complex**

Validation	All RNA	%	Pre-mRNA	%	U6	%	U2	%	U5	%
All-Atom Contacts										
Clash score	5	94	3.45	97	3	98	6	91	6	90
Nucleic Acid Geometry										
Probably wrong sugar puckers:	12	3.2	0	0	6	5.9	2	2.5	4	3
Bad backbone conformations:	121	32	28	51	41	40.2	21	26	31	22
Bad bonds:	0 / 8965	0	0 / 1286	0	0 / 2427	0	0 / 1902	0	0 / 335	0
Bad angles:	0 / 13938	0	0 / 1995	0	0 / 3778	0	0 / 2956	0	0 / 5209	0

## References and Notes

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