

## **Toolbox: Creating a systematic database of secretory pathway proteins uncovers new cargo for COPI**

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**Supplementary materials:**

**Supplementary figures:**

Supplementary figure 1: Golgi protein markers overlap profile

Anp1, Sec7 and Chc1 mCherry tagged against their N'GFP forms. All scale bars are 5µm.

Supplementary figure 2: N' tagged proteins that fully co-localize with Anp1-mCherry (Golgi)

All scale bars are 5µm.

Supplementary figure 3: N' tagged proteins that fully co-localize with Sec7-mCherry (Golgi)

All scale bars are 5µm.

Supplementary figure 4: N' tagged proteins that fully co-localize with Chc1-mCherry (Golgi)

All scale bars are 5µm.

Supplementary figure 5: N' tagged proteins that fully co-localize with Cop1-mCherry (COPI)

All scale bars are 5µm.

Supplementary figure 6: N' tagged proteins that fully co-localize with Snf7-mCherry (endosome)

All scale bars are 5µm.

Supplementary figure 7: N' tagged proteins that fully co-localize with mCherry-Vam6 (late endosome) or Sec13-mCherry (COPII)

All scale bars are 5µm.

Supplementary figure 8: Newly found proteins residing in the compartments of the secretory system

N' tagged proteins without a previously described cellular localization or function were found to reside within one or more compartments by co-localization with an mCherry tagged protein markers. All scale bars are 5µm.

Supplementary figure 9: Tagging at the two termini has an effect on steady state localization

Different cellular localization for N' tagged proteins. Shown are proteins that co-localized with secretory system compartment markers (mCherry) only when they are tagged with GFP at their N'. All scale bars are 5µm.

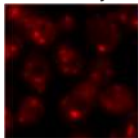
**Supplementary Tables:**

Supplementary Table 1: List of N' GFP tagged proteins showing a punctate localization.

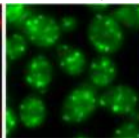
Supplementary Table 2: Annotations for N' GFP tagged proteins showing co-localization with endomembrane compartment markers.

# Sup. Figure 1

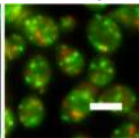
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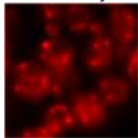
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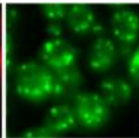
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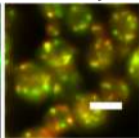
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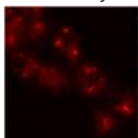
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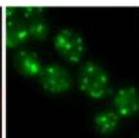
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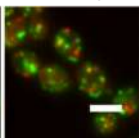
Anp1-  
mCherry



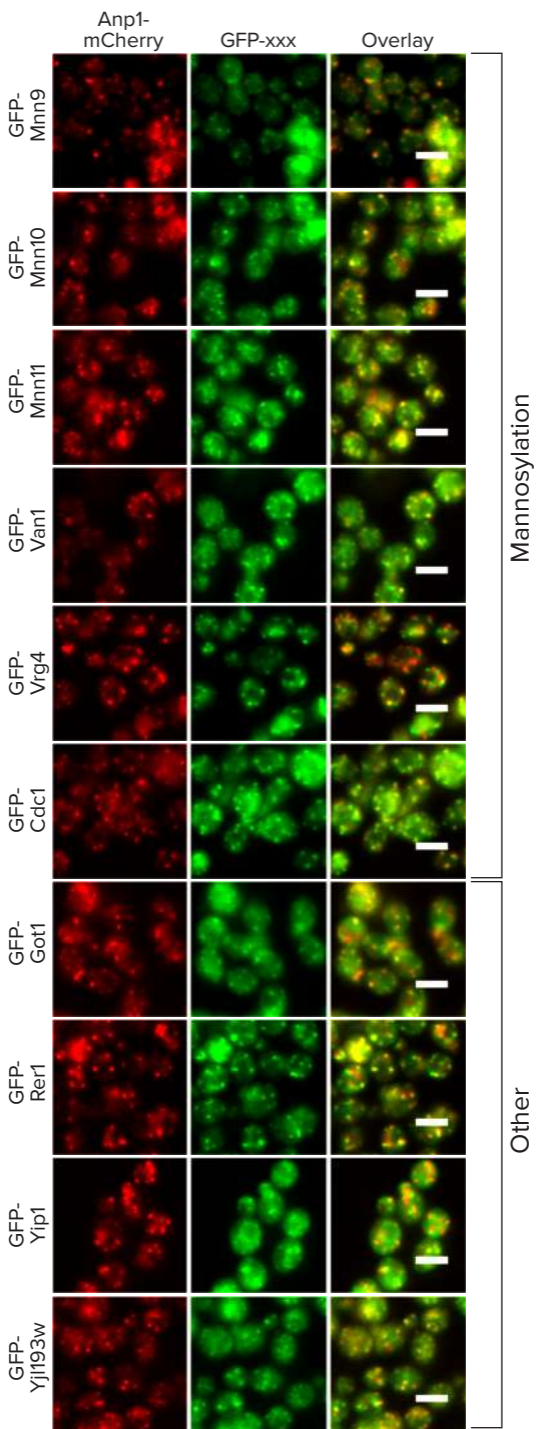
GFP-Sec7



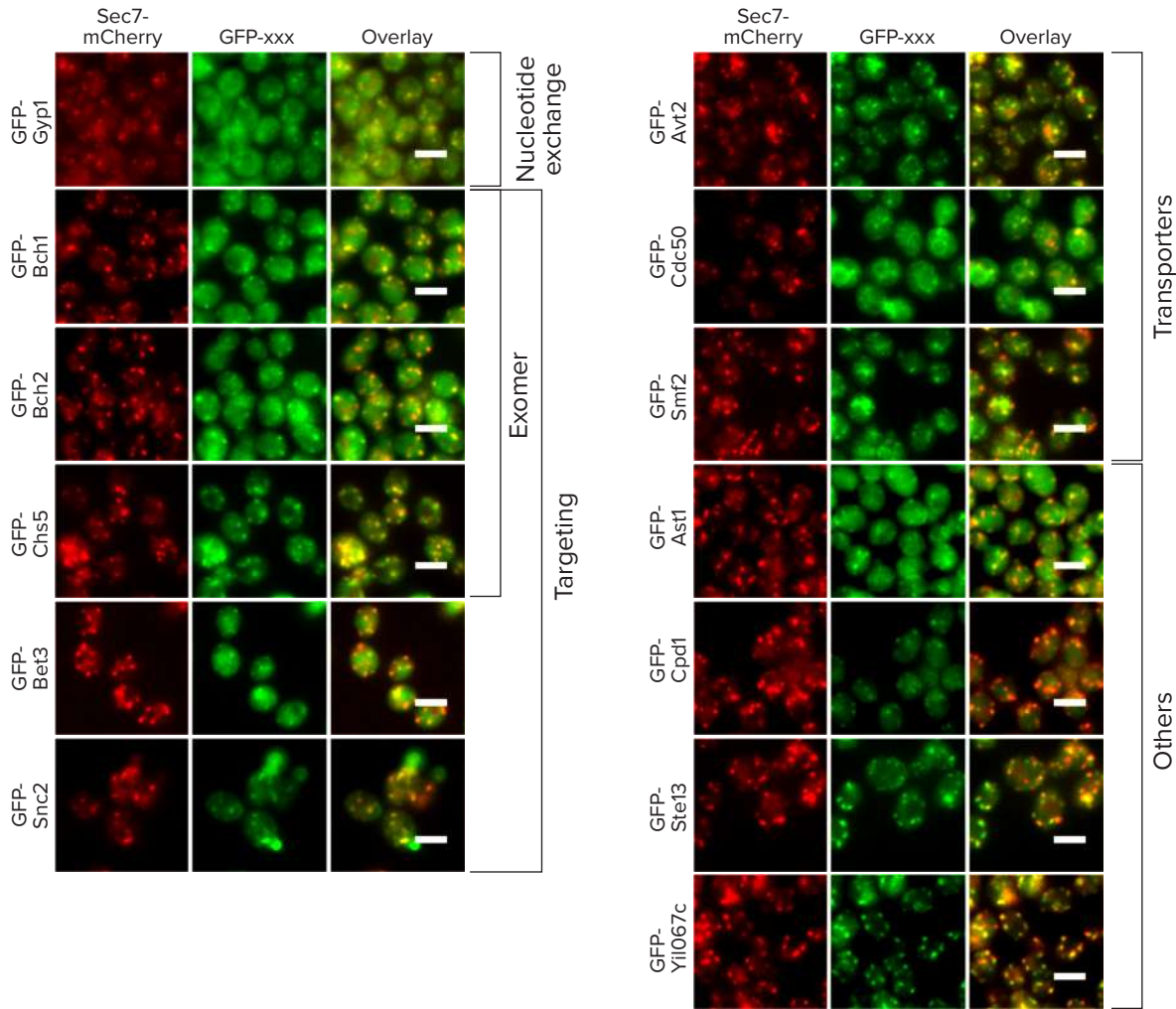
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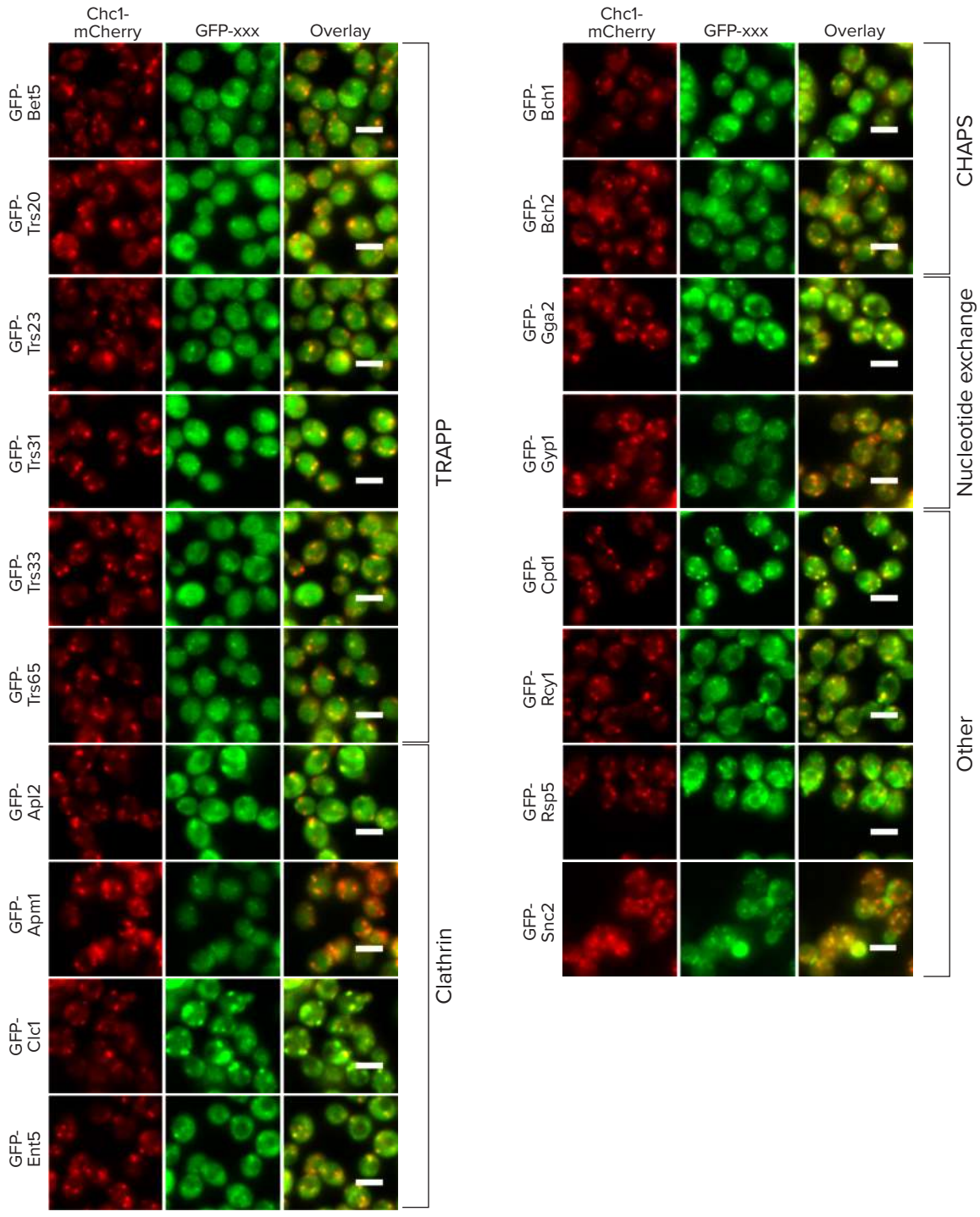
Sup. Figure 2



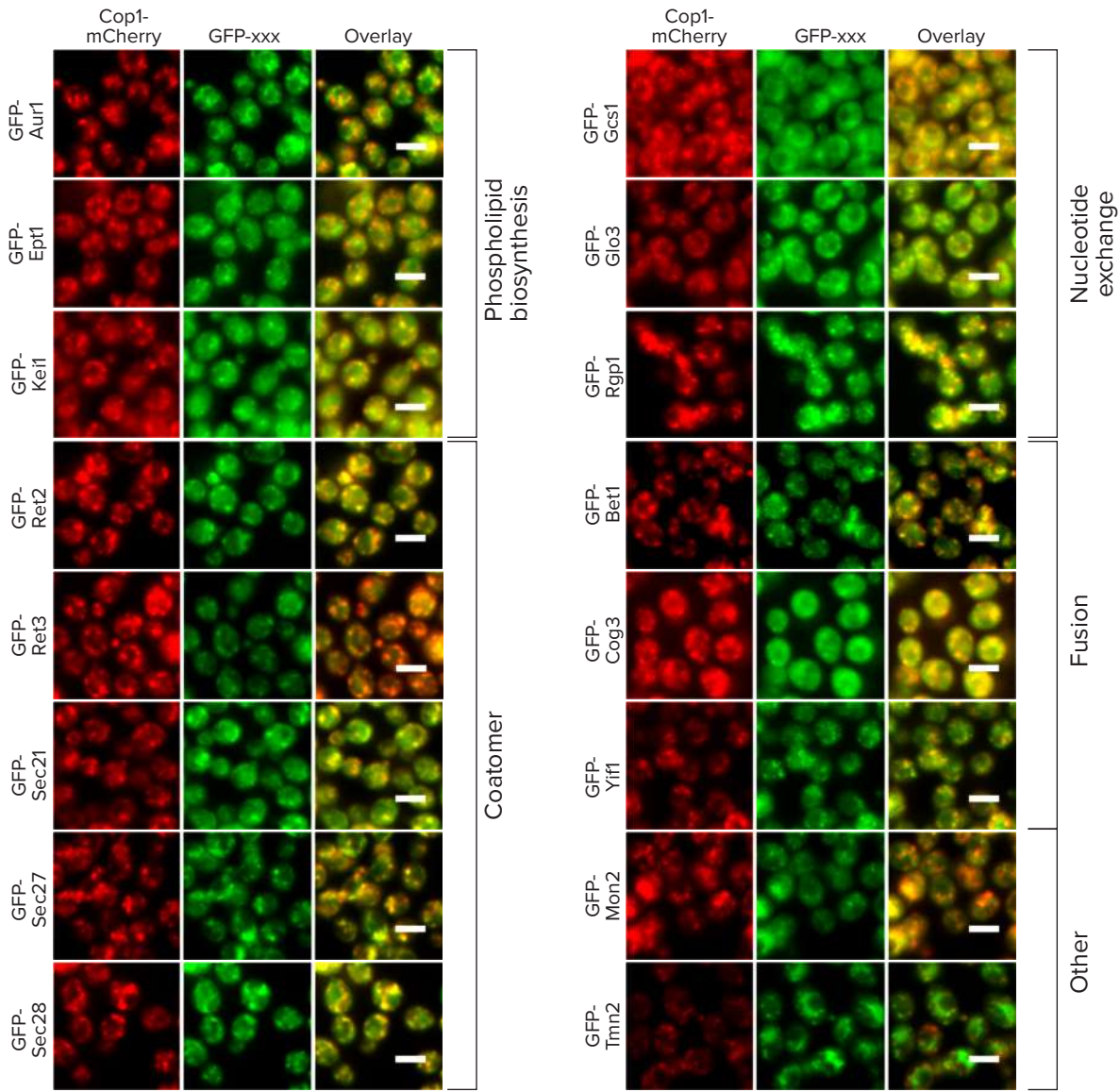
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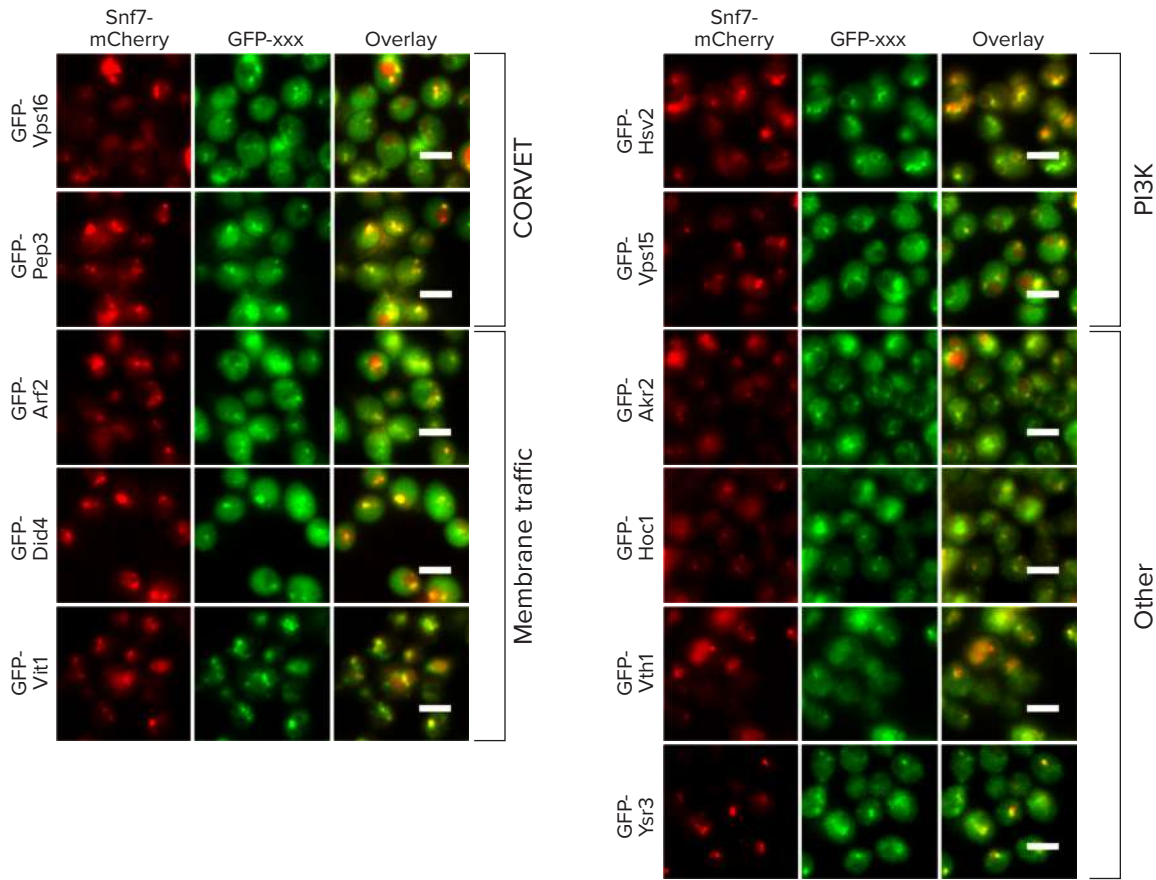
Sup. Figure 4



Sup. Figure 5

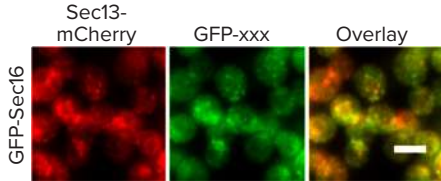
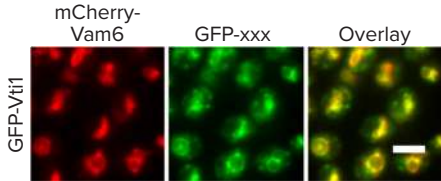


Sup. Figure 6

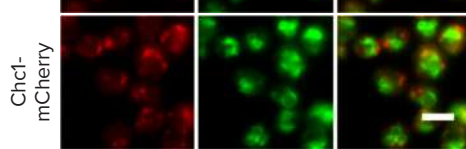
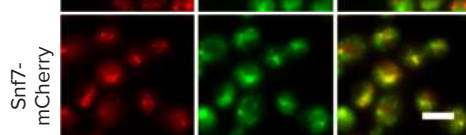
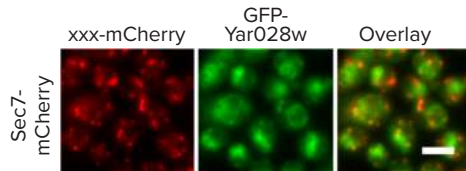
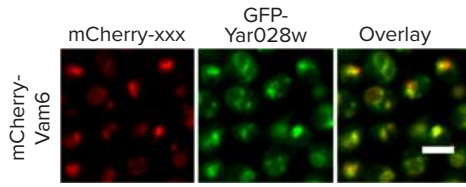
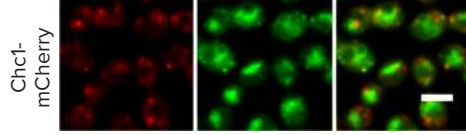
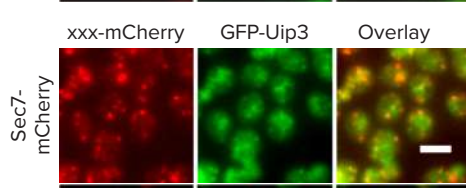
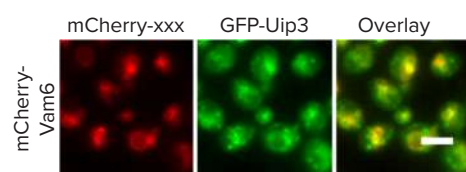
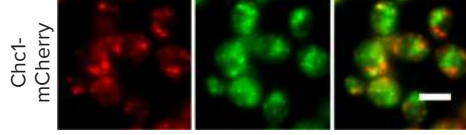
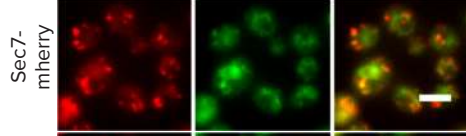
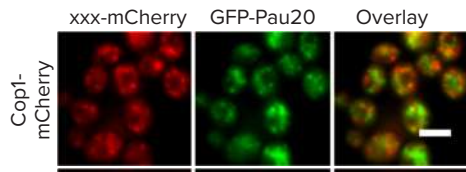
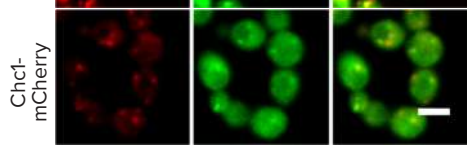
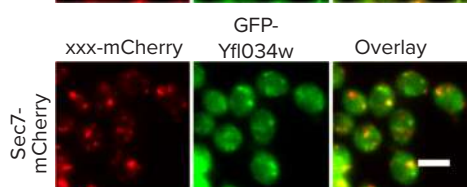
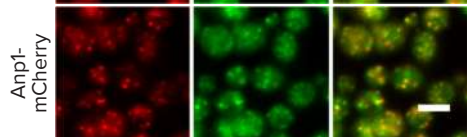
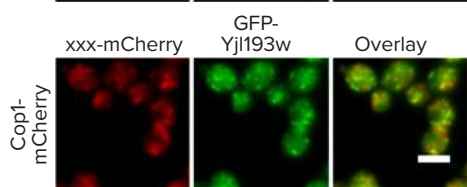
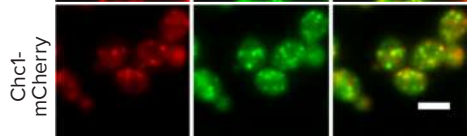
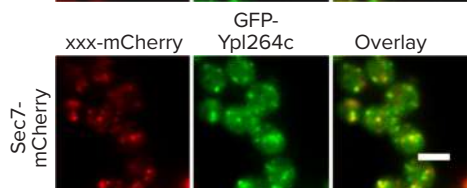
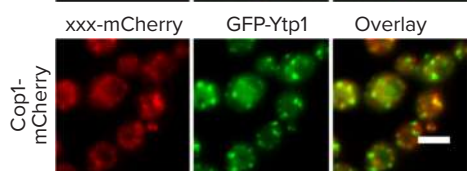
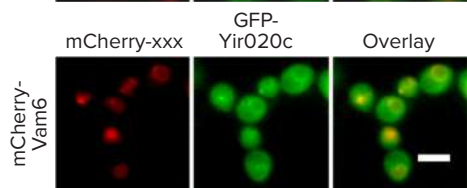
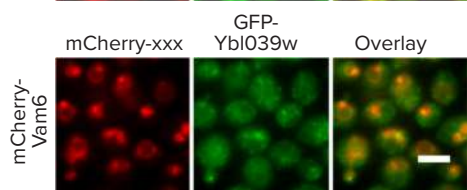
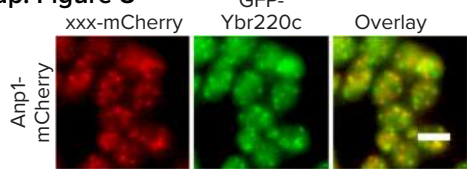




# Sup. Figure 7



Sup. Figure 8



# Sup. Figure 9

