

Carborhodol: a New Hybrid Fluorophore Obtained by Combination of Fluorescein and Carbopyronine Dye Cores

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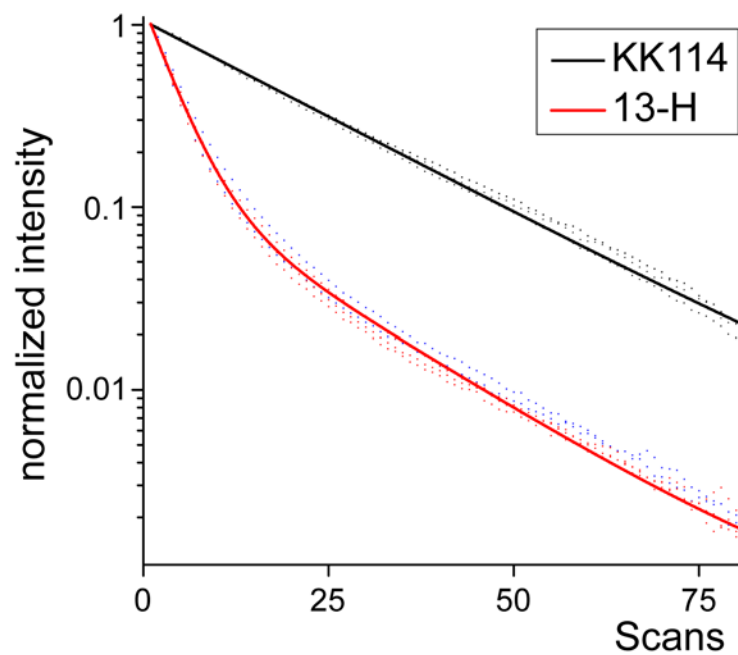
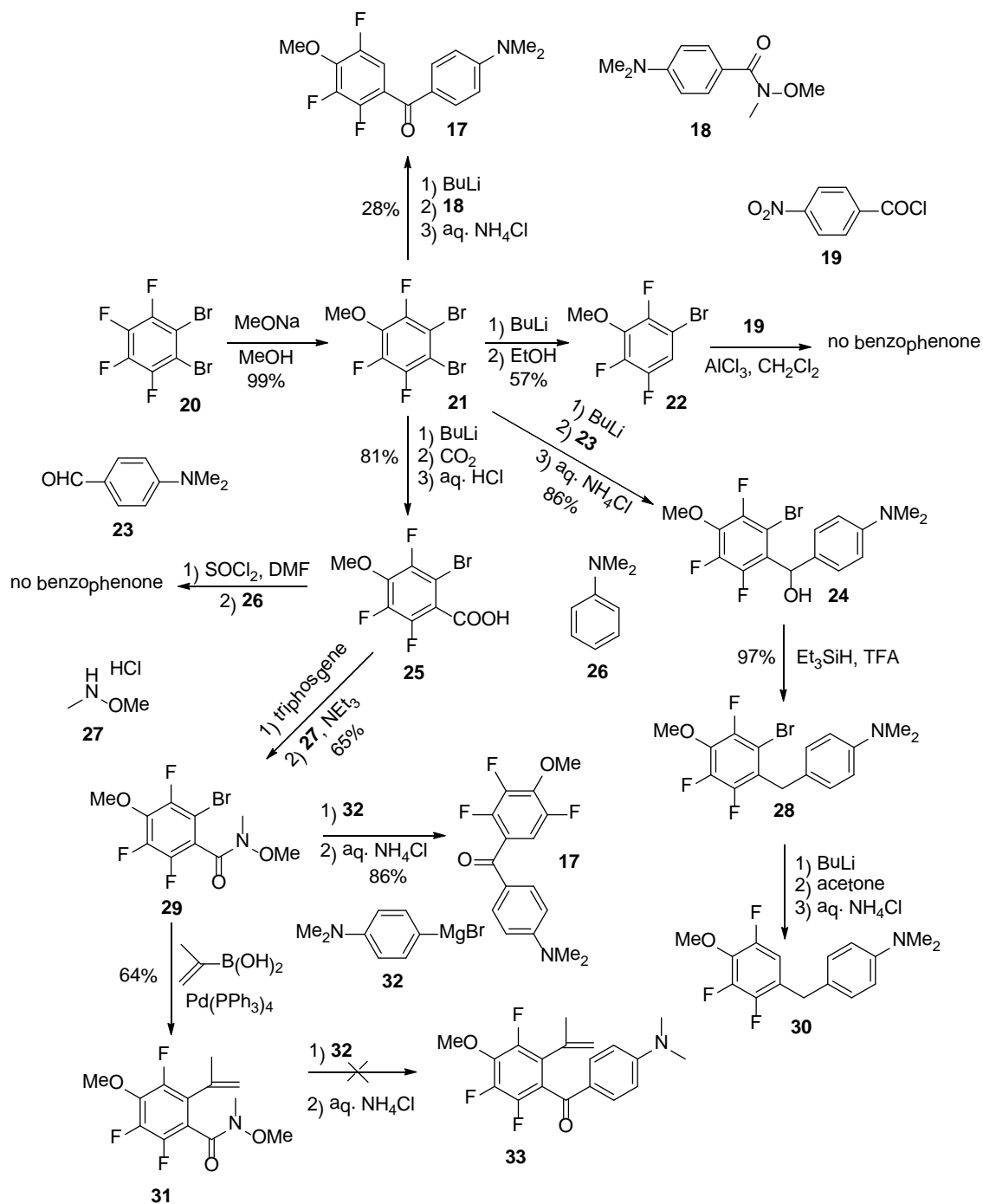


Figure S1. Comparison of photostabilities of compounds **13-H** and KK114 (reference dye). The bleaching curves were obtained in immunolabeled cell samples (Tubulin) under STED conditions (excitation: 532 nm, STED: 760 nm, detection: 650–690 nm). The individual data points and fit curves of at least three measurements are shown. The photostability of compound **13-H** is significantly lower than that of KK114. The imaging conditions were kept constant for all measurements.



Scheme S1. Attempts to obtain 2,3,5-trifluoro-4-methoxy-6-(propen-2-yl)-4'-dimethylamino benzophenone (**33**) – a possible precursor of fluorinated cabrorhodol dyes.

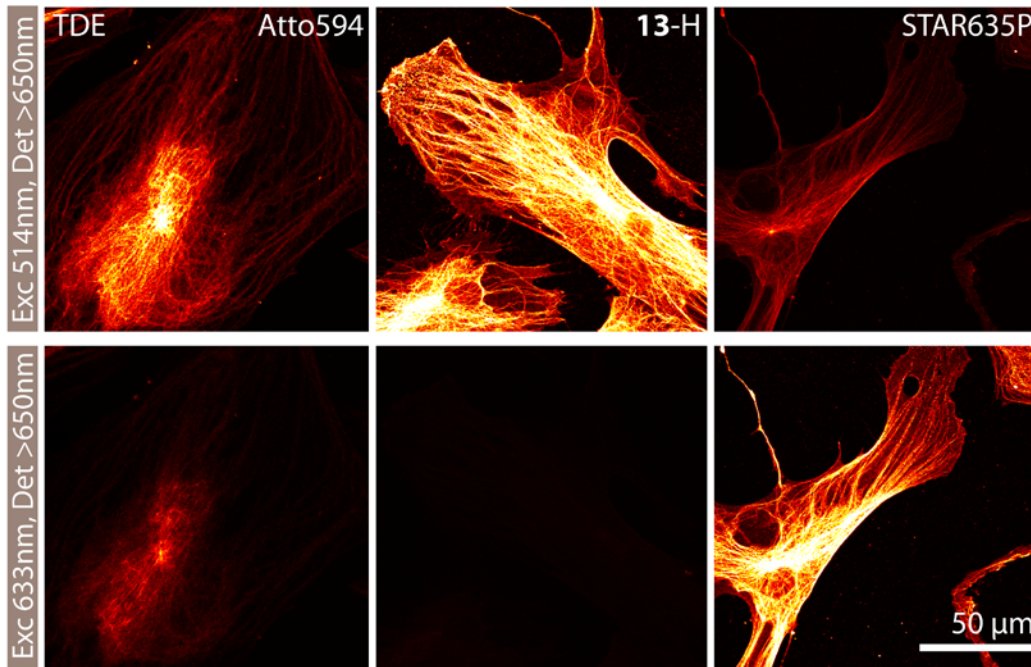


Figure S2. Crosstalk between Atto594, **13-H** and Abberior Star635P dyes in TDE (2,2'-thiodiethanol) embedding medium. To evaluate the crosstalk between the channels, the tubulin cytoskeleton in mammalian cells was labeled using the indicated fluorescent dyes. Imaging was performed in a confocal microscope with 514 nm and 633 nm excitation light, and confocal detection above 650 nm. Low crosstalk is visible in “Star635P channel” (typically <15%) and high crosstalk – in “Atto594 channel” (up to 60%), while the crosstalk in “**13-H** channel” is negligible. Star635P dye (Abberior GmbH) has the same fluorophore as KK114 dye.