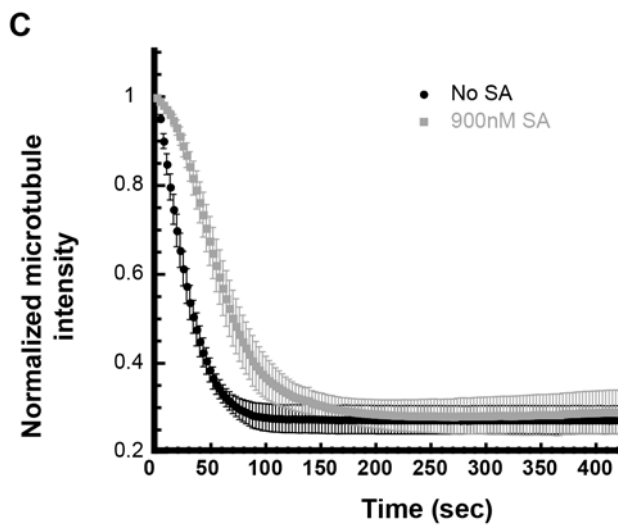
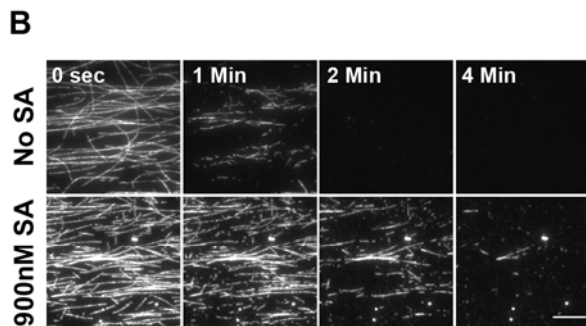
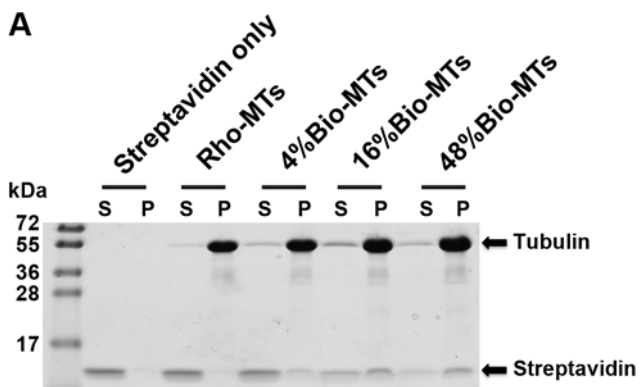


# Supplemental Materials

*Molecular Biology of the Cell*

Burkart and Dixit

## SUPPLEMENTAL MATERIAL



**Supplemental Figure S1.** Streptavidin-bound microtubules are susceptible to KTN1-mediated severing. (A) Coomassie Blue stained SDS-PAGE gel of a microtubule co-sedimentation assay. 2 $\mu$ M rhodamine-labeled, taxol-stabilized microtubules with

increasing content of biotin-labeled tubulin were incubated with 500nM streptavidin (SA). S, supernatant; P, pellet. Arrows identify the different protein bands. (B) Time course of rhodamine-labeled, taxol-stabilized microtubules containing 48% biotin-labeled tubulin in the presence of either 25nM KTN1 alone or with a 10-minute pre-incubation with 900nM streptavidin (SA). Scale bar is 10 $\mu$ m. (C) Plot of microtubule signal intensity over time from experiments shown in (B). Each image in a series is normalized to the fluorescence intensity of the first frame of that series. Error bars represent s.e.m. (No SA, n = 5 movies, 900nM SA, n = 5 movies).