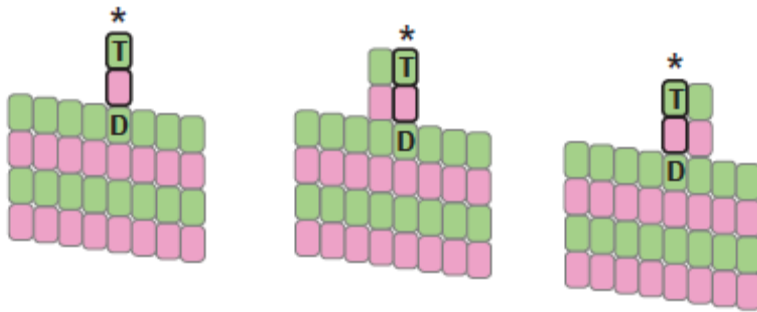
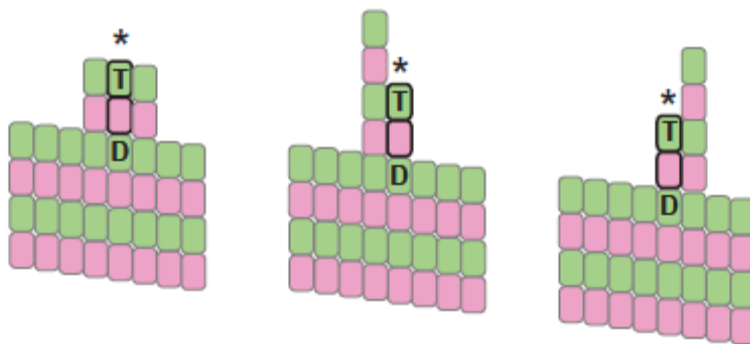


# Supplemental Materials

*Molecular Biology of the Cell*

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**A****B**

**Supplemental Fig. 1.** Elements of trans-action in an earlier model incorporating cis-acting GTP. (A) In the model from VanBuren et al., terminal GTP-bound subunits (bold and indicated by a \*) that are above a GDP-bound subunit and that have zero or one neighbor as indicated were ‘tagged’ to dissociate according to the GDP rule even though that model assumed cis-acting GTP. This tagging was an attempt to implicitly capture mechanochemical features of the microtubule end (such as protofilament peeling) that were not modeled explicitly. (B) In that same model, terminal GTP-bound subunits that are above a GDP-bound subunit and that have two or more neighbors as indicated dissociated according to the GTP rule (cis action). We implemented these same assumptions in our tests of a cis model.