

Supplemental References

- Buey, R.M., Sen, I., Kortt, O., Mohan, R., Gfeller, D., Veprintsev, D., Kretzschmar, I., Scheuermann, J., Neri, D., Zoete, V., *et al.* (2012). Sequence determinants of a microtubule tip localization signal (MtLS). *The Journal of biological chemistry* 287, 28227-28242.
- Castoldi, M., and Popov, A.V. (2003). Purification of brain tubulin through two cycles of polymerization-depolymerization in a high-molarity buffer. *Protein expression and purification* 32, 83-88.
- Efimov, A., Kharitonov, A., Efimova, N., Loncarek, J., Miller, P.M., Andreyeva, N., Gleeson, P., Galjart, N., Maia, A.R., McLeod, I.X., *et al.* (2007). Asymmetric CLASP-dependent nucleation of noncentrosomal microtubules at the trans-Golgi network. *Developmental cell* 12, 917-930.
- Faire, K., Waterman-Storer, C.M., Gruber, D., Masson, D., Salmon, E.D., and Bulinski, J.C. (1999). E-MAP-115 (ensconsin) associates dynamically with microtubules *in vivo* and is not a physiological modulator of microtubule dynamics. *Journal of cell science* 112 (Pt 23), 4243-4255.
- Komarova, Y., De Groot, C.O., Grigoriev, I., Gouveia, S.M., Munteanu, E.L., Schober, J.M., Honnappa, S., Buey, R.M., Hoogenraad, C.C., Dogterom, M., *et al.* (2009). Mammalian end binding proteins control persistent microtubule growth. *The Journal of cell biology* 184, 691-706.
- Svitkina, T. (2009). Imaging cytoskeleton components by electron microscopy. *Methods in molecular biology* 586, 187-206.
- Zhu, Z.C., Gupta, K.K., Slabbeekoor, A.R., Paulson, B.A., Folker, E.S., and Goodson, H.V. (2009). Interactions between EB1 and microtubules: dramatic effect of affinity tags and evidence for cooperative behavior. *The Journal of biological chemistry* 284, 32651-32661.