

Review of: "Revising the Role of Cortical Cytoskeleton During Secretion: Actin and Myosin XI Function in Vesicle Tethering"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

In this study, the authors developed a quantitative image analysis approach to measure vesicle tethering frequency at the PM. Further, by quantitatively assessing the late stages of CSC secretion in oryzalin-treated cells, they showed that cortical microtubules only play a minor role in vesicle tethering.

The image analysis developed by the authors will be a very useful method for quantifying exocytosis and endocytosis events near the PM.

Combination of this quantitative method and oryzalin-treatment, they showed that cortical microtubules only play a minor role in vesicle tethering.

However, as shown in Fig. 3B, the orientation of the cortical microtubules was disturbed by the oryzalin treatment, but many of the cortical microtubules appear to remain. Furthermore, in these oryzalin-treated cells, many YFP-CESA6 appear to be localized on the remaining microtubules. There may be a concern that quantitative analysis in these cells will not be able to determine if microtubules are involved in vesicle tethering.

Isn't it necessary to increase the oryzalin concentration or lengthen the treatment time until the apparent cortical microtubules disappear?