

Supplemental Figure Legend

Fig. S1. Movie of slices made through the F-actin/ β CaMKII tomographic reconstruction. F-actin was formed as described in the Materials and Methods and β CaMKII was added for 15 min at room temperature. A sample was then prepared by applying an aliquot of the F-actin/ β CaMKII mix to an EM grid, followed by blotting and cryo-preservation. A series of tilt images were collected at -170°C under low electron dose conditions and tomographic reconstructions were accomplished. This movie shows slices moving down through the tomographic reconstruction (contrast inverted) at approximately 2 nm per slice. The distinct light spherical structures are the 10 nm gold balls added as fiducial markers for the initial alignment. The β CaMKII holoenzymes can be clearly seen interspersed with and bundling the actin filaments. A slice through this tomogram was used to generate the image shown in Fig. 2B of the manuscript.