

### Supplemental Movie Legends

**Supplemental Movie 1:** Movement of CAMKK7 in guard cells: Cotyledon of 7 DPG plant expressing FAMProCAMKK7-YFP. Note the dynamics of movement of CAMKK7-YFP particles. Cell outlines are delineated by a plasma-membrane tethered mCherry.

**Supplemental Movie 2:** Movement of MitoTracker Orange labeled mitochondria in guard cells. Cotyledon of 7 DPG Col seedling following treatment with MitoTracker Orange to stain mitochondria. The dynamics of mitochondrial motion resemble that of CAMKK7-YFP particles shown in Supplemental Movie 1.