

## PDMP induces rapid changes in vacuole morphology in *Arabidopsis* root cells

Falco Krueger, Melanie Krebs, Corrado Viotti, Markus Langhans, Karin Schumacher, and David G Robinson

### Supplementary Data

**Fig. 1. PDMP effects on the Golgi apparatus of *Arabidopsis* root cells.** Only at high concentrations (50  $\mu\text{M}$ ) does PDMP treatment perturb Golgi structure (A). At 10  $\mu\text{M}$  no visible structural modifications were observed (B).

### See separate files for:

**Supplementary movie S1.** Cytoplasmic  $\text{Ca}^{2+}$  dynamics in *Arabidopsis* root cells treated with 100  $\mu\text{M}$  PDMP

Time laps of brightfield and ratiometric image sequences showing an *Arabidopsis* root expressing the cytoplasmic localized  $\text{Ca}^{2+}$  sensor NES-YC3.6. Seedlings were treated with 100  $\mu\text{M}$  PDMP followed by application of 1 mM ATP. Ratio changes that indicate modified levels of cytoplasmic free  $\text{Ca}^{2+}$  are visualized in false colors. Image acquisition was performed every 6 s. Scale bar indicates 50  $\mu\text{m}$ .

**Supplementary movie S2.** Cytoplasmic  $\text{Ca}^{2+}$  dynamics in *Arabidopsis* root cells treated with 10  $\mu\text{M}$  PDMP

Time laps of brightfield and ratiometric image sequences showing an *Arabidopsis* root expressing the cytoplasmic localized  $\text{Ca}^{2+}$  sensor NES-YC3.6. Seedlings were treated with 10  $\mu\text{M}$  PDMP followed by application of 1 mM ATP. Ratio changes that indicate modified levels of cytoplasmic free  $\text{Ca}^{2+}$  are visualized in false colors. Image acquisition was performed every 6 s. Scale bar indicates 50  $\mu\text{m}$ .

**Supplemental movie S3.** Cytoplasmic  $\text{Ca}^{2+}$  dynamics in *Arabidopsis* root cells treated with 0.1 % DMSO

Time laps of brightfield and ratiometric image sequences showing an *Arabidopsis* root expressing the cytoplasmic localized  $\text{Ca}^{2+}$  sensor NES-YC3.6. Seedlings were treated with 0.1% DMSO followed by application of 1 mM ATP. Ratio changes that indicate modified levels of cytoplasmic free  $\text{Ca}^{2+}$  are visualized in false colors. Image acquisition was performed every 6 s. Scale bar indicates 50  $\mu\text{m}$ .

# Figure S1

