



Figure S1. Effects of ADP, AMP and ATP γ S on stomatal aperture in wild type (WT), *Arabidopsis* loss-of-function mutants for *APY1* and *APY2* (*Atapy1* and *Atapy2*), and transgenic lines of *PeAPY1* and *PeAPY2* (*PeAPY1-OE* and *PeAPY2-OE*). Leaves from three-week-old seedlings were incubated in MES-Tris buffer containing 50 mM KCl and 10 mM MES-Tris (pH 6.15) in light ($150 \mu\text{mol m}^{-2} \text{s}^{-1}$) (A) or in darkness (B). Thereafter leaves were exposed to 0.3 mM ADP, AMP or ATP γ S for 2 h in light ($150 \mu\text{mol m}^{-2} \text{s}^{-1}$). Controls were treated without the addition of ADP, AMP or ATP γ S. Stomatal aperture was measured in continuously illuminated leaves (A) and dark-adapted leaves transferred to light (B), respectively. Each column is the mean of three independent experiments, and error bars represent SE. Columns labeled with different letters, a, b, c, showed significant difference at $P < 0.05$ between treatments and genotypes under conditions of continuous light (A) or dark-adapted leaves transferred to light (B).