



### Supplementary information, Figure S1

Sequence alignment of the ectodomains of TMK1 and its homologs from *Arabidopsis*

Top: schematic representation of TMK1 protein. TM: transmembrane domain; KD: kinase domain; LRR: leucine rich repeat. Bottom: Sequence alignment of the ectodomains of TMK1 and its homologs from *Arabidopsis*. Conserved and similar residues are highlighted with red and yellow ground respectively. Two cysteines that form a disulfide bond are labeled with the same number (in green) at bottom. LRR' and LRR'' represent the half LRR from the N-LRR and C-LRR of TMK1 respectively. Residues involved in interaction between the non-LRR region (pink) and N-LRR (blue) are highlighted with solid squares on top.