

**Supplementary information, Figure S1** Schematic representation of the luminescent proximity assay (ALPHA [Amplified Luminescent Proximity Homogenous Assay] Screen, Perkin Elmer). H6-SUMO-PYR1 is immobilized on Ni-chelating acceptor beads and biotinylated HAB1 (Biotin-MBP-HAB1) on streptavidin-coated donor beads. Donor beads contain a photosensitizer that upon activation at 680 nm converts ambient oxygen to singlet oxygen. If acceptor beads are brought into close proximity of the donor beads by HAB1-PYR1 interaction, energy is transferred from singlet oxygen to thioxene derivatives in the acceptor beads resulting in light emission at 520-620nm. Addition of ABA receptor agonist enhance the signal of acceptor bead-immobilized H6-SUMO-PYR1 and donor-bead-MBP-Biotin-HAB1.