



Fig. S2. Establishment of the semi-*in vitro* AtLURE1.2-responsive wavy assay.

(a) Images of WT pollen tubes growing semi-*in vitro* on the solid germination medium containing AtLURE1.2 peptide. The magnified images in the yellow boxed region are shown below, providing a closer look at the pollen tube morphology. Additionally, images of WT and *prk6* pollen tubes grown in the presence of various concentrations of AtLURE1.2 peptides are presented to compare the responses. The genotype of the pollen tubes and the concentration of AtLURE1.2 peptides used in each experiment are clearly indicated. Scale bars, 50 μm (top) and 20 μm (bottom).

(b) Images of WT pollen tubes growing *in vitro* in the presence or absence of AtLURE1.2 peptides are provided for comparison. The differences in the pollen tube growth patterns are clearly visible. The micrographs presented are representative of three samples, ensuring the reproducibility of the observed phenotypes. Scale bars, 200 μm .