The transcription factor SEEDSTICK (STK) plays an important role in specifying ovule and seed integument identity. Ezquer et al. (pages 2478–2492) show that STK controls structural characteristics of the cell wall in addition to its role in organ identity. The cover image shows a 3D reconstruction of the epidermal surface of wild-type Arabidopsis seed stained with LM19 antibody for pectin homogalacturonan. Densely stained “rays” extending outward from the seed surface can be seen. The stk mutant exhibits structural modifications of the cell wall matrix that contribute to defects in mucilage release and seed germination under water-stress conditions. STK was found to directly regulate PMEI6 and other genes associated with biosynthesis of the cell wall cellulose-pectin matrix. Bar = 100 mm.
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