



Supplemental Figure 3. Both PIN7 protein splice variants show similar polarity changes in response to the gravitropic and phototropic stimuli. Related to Figure 3.

(A–D) Relocalization of PIN7a-GFP and PIN7b-RFP to the lower side of the root columella cells (yellow arrows) after gravity stimulus (A and B). Quantification of the fluorescence 5 min and 30 min after the gravistimulus (C and D).

(E) Initial localization of SCR::PIN7a-GFP and SCR::PIN7b-RFP in the hypocotyl prior to the stimulus.

(F) Polarity change of SCR::PIN7a-GFP and SCR::PIN7b-RFP from the upper (white arrows) to the lower part (yellow arrows) of hypocotyl endodermal cells in the hypocotyl 6 h after gravity stimulation.

(G) Re-establishment of the initial polarity of SCR::PIN7a-GFP and SCR::PIN7b-RFP in the hypocotyl 24 h after gravity stimulation.

(H) PIN7::PIN7a-GFP and PIN7::PIN7b-RFP polarity change from illuminated (white arrows) to the shaded side (yellow arrows) of hypocotyl endodermis after 4 h of unilateral light stimulation.

(I) Quantification of polarity changes of the PIN7 isoforms in the hypocotyl during gravity and light stimuli. On (C and H), the middle line represents median, the box corresponds to the 25% and 75% quartiles, whiskers represent maxima and minima, dots represent single data points, asterisks represent significance between stimulated line and its respective non-stimulated control (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ by ANOVA). Bars, 25 μm on (A, B, E–G).