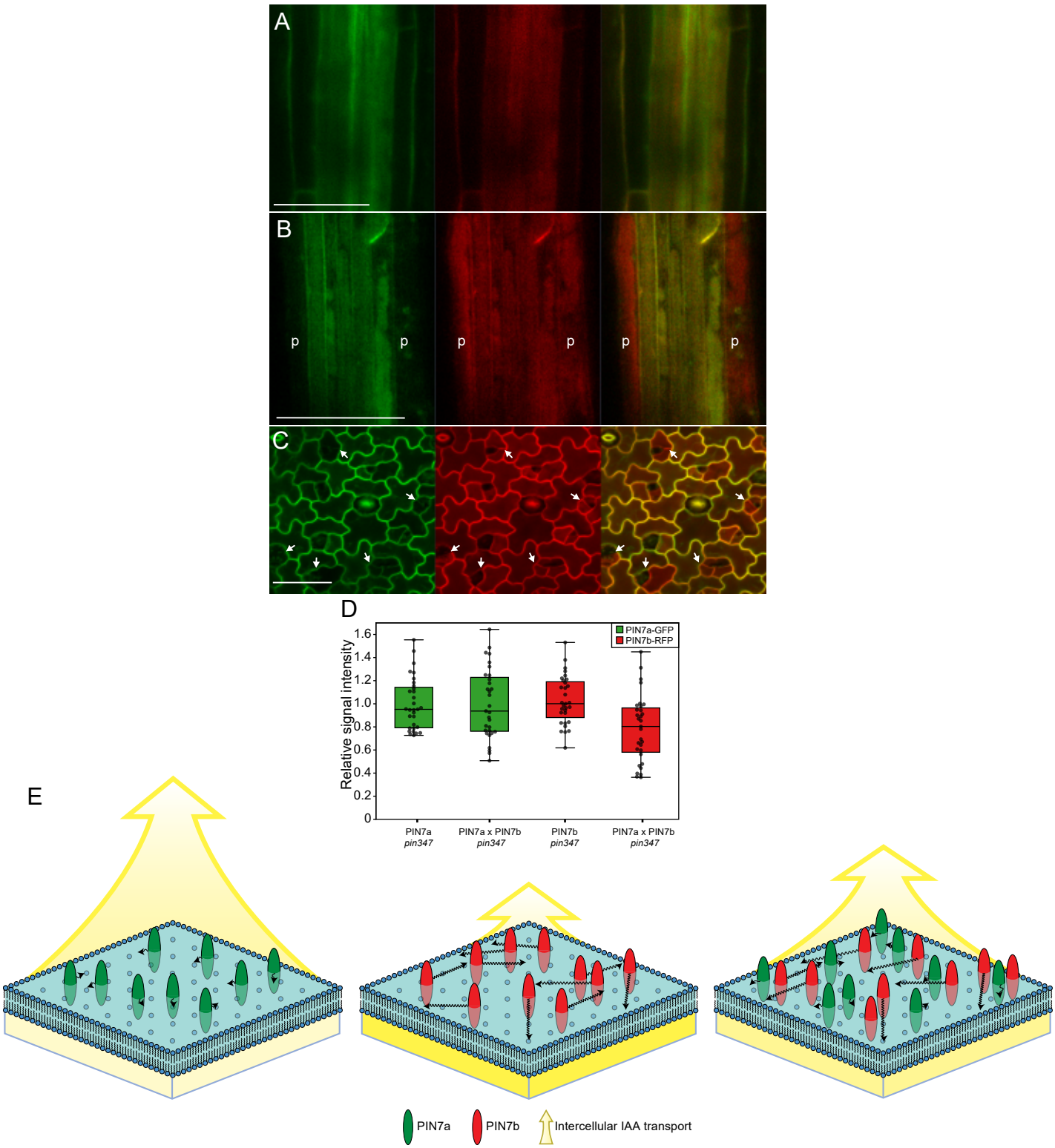

Supplemental Figure 6. Additional expression analysis of PIN7a and PIN7b splicing reporter and fluorescently tagged cDNAs. Related to Figures 5 and 6.

(A) Uniform PIN7 splicing reporter signal in the vascular cylinder of the etiolated hypocotyl.

(B–D) Differential expression of the PIN7 splicing reporter in the proximity of the phloem side of the pericycle (p) in the mature primary root (B) and in the stomatal lineage ground cells of the cotyledon epidermis (C).

(D) A comparison of the fluorophore intensities in the pin347 mutants carrying the combinations of the PIN7a-GFP and PIN7b-RFP cDNAs. The values were not significant within the given significance level ($P > 0.05$ by Student's t-test). The box corresponds to the 25% and 75% quartiles, whiskers represent maxima and minima, dots denote single data points. For each line, 3 cells in 10 roots were measured (n = 30).

(E) A proposed scheme of interaction between PIN7a and PIN7b and its effect on polar auxin transport in Arabidopsis. PIN7a, when expressed alone, occupies the immobile membrane clusters and mediates the increased capacity of polar auxin flow. PIN7b, is able to perform basal auxin transport in Arabidopsis as well. When both isoforms present, the PIN7b transporting activity (reflected by higher lateral diffusion of the transporter) interferes with the directional polar flow provided by PIN7a.
Bars, 50 µm on (A-C).