

Figure 4. SCAP1 promotes SPCH protein but not transcript accumulations

(a) Pattern of SCAP1 and SPCH transcript accumulations determined by quantitative PCR in manually dissected first two leaf primordia of wild-type (CoI) seedlings at different days after germination. ACTIN (ACT2) was used for normalization. Values represent the mean of three biological replicates (30 leaves / replica). Error bars = standard deviation.

(b) GUS staining of scap1-2 in wild-type or spch-4 mutant background in 5 day old seedlings. Bar = 100 μm

(c) Confocal images of hemizygous proPIN3:PIN3-GFP proSPCH:SPCH-GFP pro35S:SCAP1-GR transgenic plants. Shown is the first leaf of plants treated with DEX or mock-treated. Insets show a portion of leaf at higher magnification. Scale bar = 500 μm.

(d) Quantification of epidermal cells accumulating SPCH-GFP proteins in control (mock) or DEX-treated plants. Shown is the average total number of epidermal cells in 6-8 independent first leaf primordia (5 dag). This experiment was performed twice with similar results. Values were compared with one-way ANOVA. NS = not significant.

(e) Mean fluorescence intensity of SPCH-GFP protein nuclear accumulation in control (mock) or DEX treated plants described in (d).