Spcdc25 alters ethylene, cytokinin and auxin synthesis, expression of ethylene and cytokinin signalling genes and hypocotyl growth responses.

(A) real time PCR analysis of relative expression of four genes related to ethylene and cytokinin signalling in roots of 10 day old seedlings. n=3 . (Above each histogram bar is the array result Spcdc25/WT);

(B) relationship between hypocotyl length (mm) and time (days), in seedlings grown in dark (D, closed symbols) or 16 h L, 8 h L (L/D, open symbols), (error bars < diameter of symbols) n=25;

(C) hypocotyl length in seedlings exposed to 0, 10 or 100 ppm ethylene for 10 days. n=20;

(D) endogenous ethylene levels (ppb per seedling) in 10 day old seedlings in WT and Spcdc25 n=3; number of seedlings measured in each replicate sample, WT 1. 273, 2. 238, 3. 413; Spcdc25 1. 181, 2. 276, 3. 188

(E) endogenous cytokinins and

(F) endogenous IAA, in whole root systems of 10 day old seedlings. n =3

C-F: WT (black bars) Spcdc25 (white bars)

All data are means ±S.E levels of significance (P) are indicated by Student’s t-test: P *** < 0.001, P ** 0.02-0.001 P* 0.02-0.05