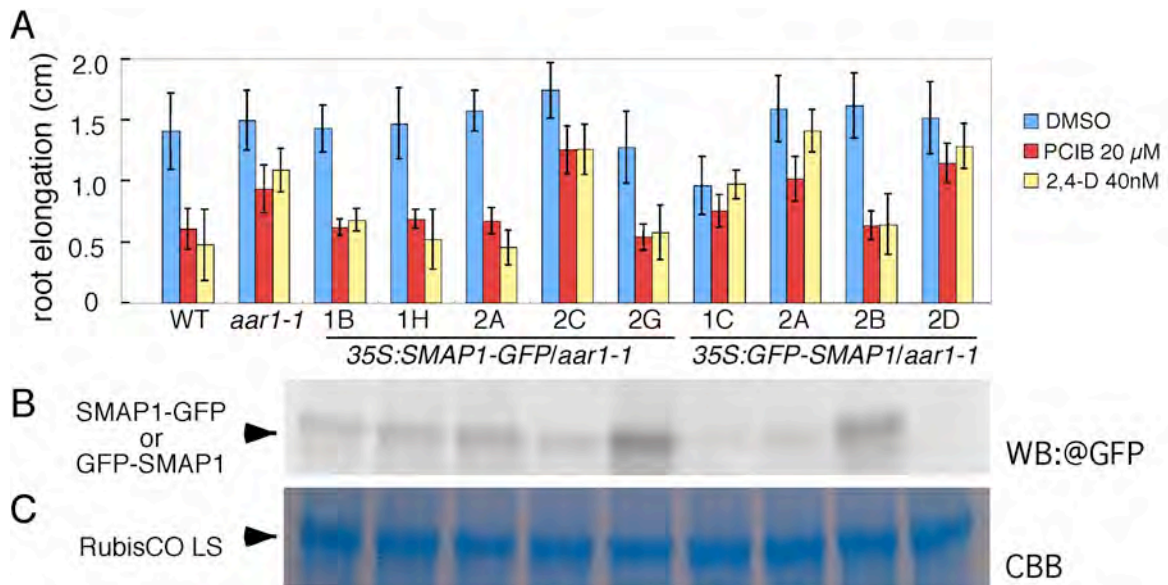


Table S1. List of primers used in this study for genotyping of mutant and transgenic lines.

Primer name	Sequence (5' to 3')	References
T6G15 9538F	AATGTTGGCTTGTTCCCTTG	
T6G15 53634R	TGGTGGTACAATGGTCAACG	
T6G15 24488F	TCAAACAAGGTGGAGACAGAGA	
AT4G13490F2	TGGCTAATGATGCTGACGAA	
K5K13 F38890	GATCACATTCCAACAACAGA	
K5K13 R39225	CGAGCTTCGATCTGAAAAGC	
LB1	CAAACCAGCGTGGACCGCTTGCTGCAACTC	<a href="http://signal.salk.edu">http://signal.salk.edu</a>
TIR1gF547	ATTGAGGCCATGTCTTCGTC	
TIR1gR913	GAACAACGCAGCAAAACCTA	
AXR1-12F	TTCGGAGCATTATCAGAAACA	
AXR1-12R	GGGAAAATTCGCACCTGTAA	
CSN5A-1F	CATTAGTCCCCAAATCCATA	
CSN5A-1R2	CCAGCTTGCTGGTCTGAGAG	
LBb1	CAGCGTGGACCGCTTGCTGCAACTCTCTCA	Dohmann et al., 2008
13520ATG-topo	CACCATGAGGCCGATGCAGCTGG	
13520R-TAA	GTTGATATCGGTGTCATCGAA	
13520R+TAA	TTAGTTGATATCGGTGTCATC	

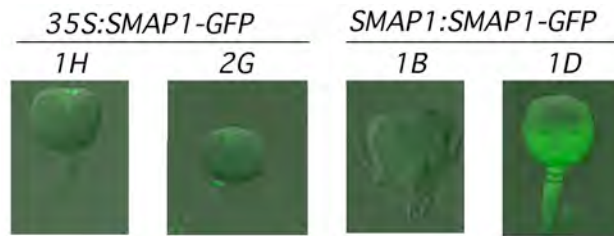


**Figure S1. Complementation of the *aar1-1* phenotype with SMAP1 and GFP fusion protein expressed under control of the 35S promoter.**

Five independent transgenic lines for *35S:SMAP-GFP* (line 1B, 1H, 2A, 2C, 2G) and four lines for *35S:GFP-SMAP1* (line 1C, 2A, 2B, 2D) were generated by transforming *aar1-1* mutants.

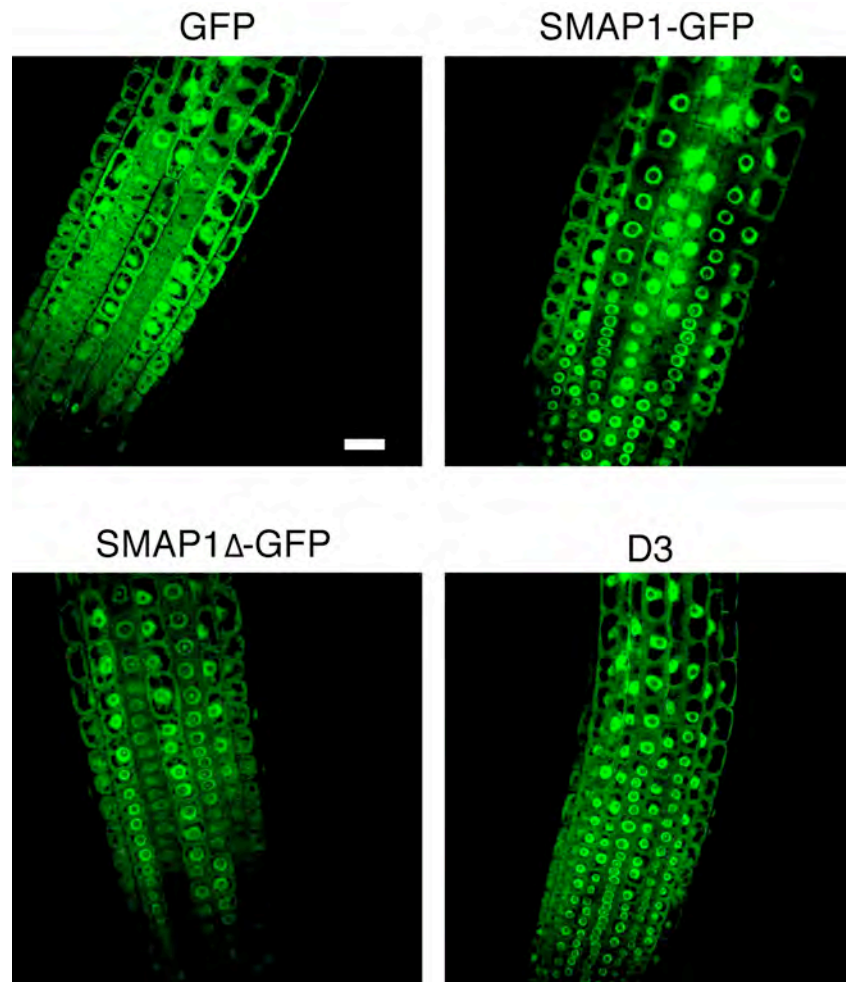
(A) Seeds were sown on germination medium (GM) containing indicated chemicals and grown vertically. Root elongation from day 4 to 7 was determined.

(B and C) Total proteins were separated by SDS-PAGE, followed by western blotting with immunodetection using anti-GFP antibody (B) or Coomassie blue (CBB) staining (C). Restoring sensitivity to PCIB and 2,4-D in the *aar1-1* background was correlated with expression level of SMAP1-GFP or GFP-SMAP1 fusion protein.

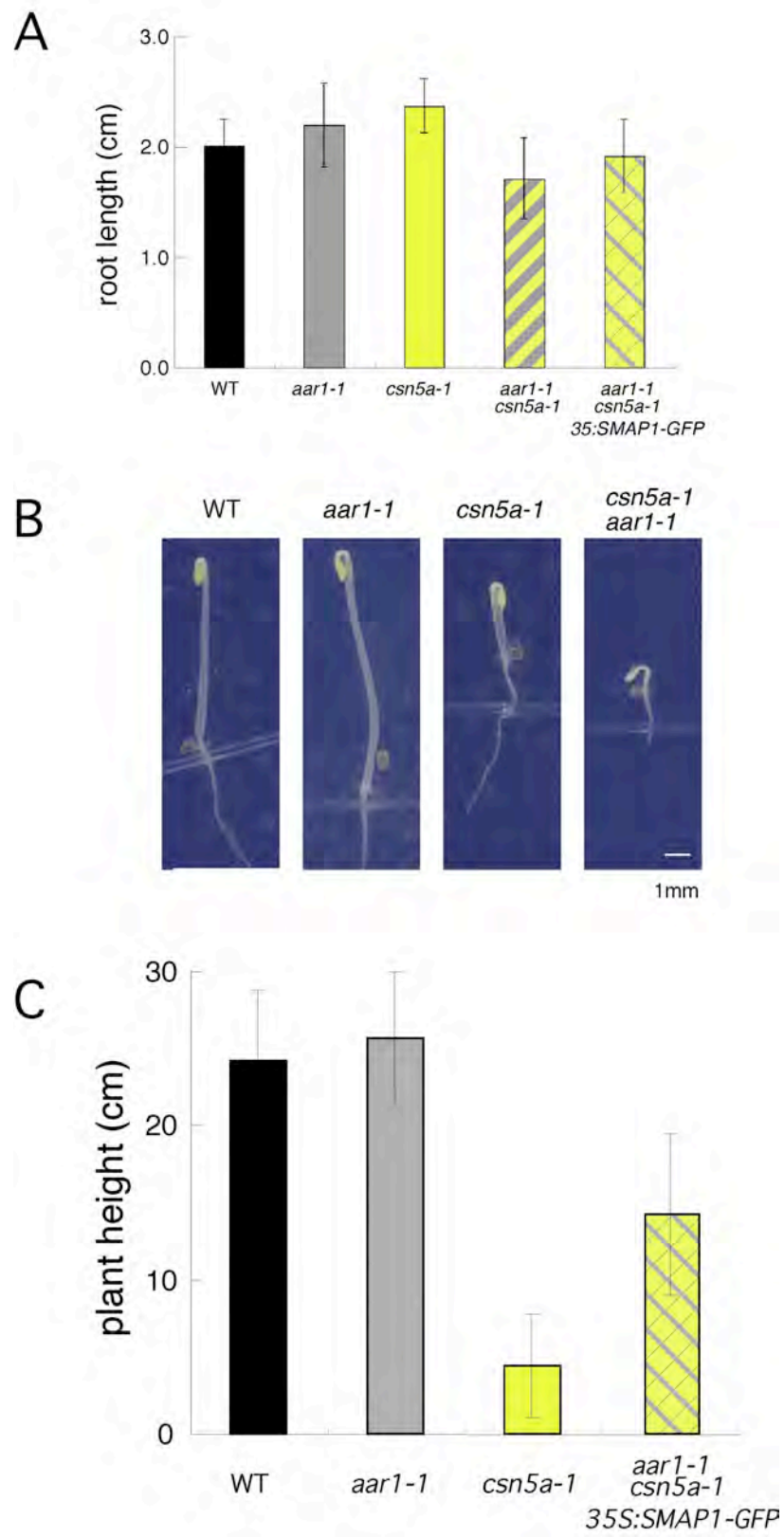


**Figure S2. Expression of SMAP1-GFP at early embryonic stage.**

Embryos from independent transgenic lines of *35S:SMAP1-GFP/aar1-1* (lines 1H and 2G) and *SMAP1:SMAP1-GFP/aar1-1* (lines 1B and 1D) were observed under a confocal microscope ( $n > 6$ ). *SMAP1:SMAP1-GFP/aar1-1* 1D showed strong GFP fluorescence and complemented the abnormal phenotype of the *axr1-12 aar1-1* double mutant when crossed with *axr1-12* (Figure 2X). The remaining three lines showed only weak GFP fluorescence and did not effectively complement the double mutant (Figure 2O–W, and Y).



**Figure S3 Cellular localization of GFP fluorescence in root tip epidermal cells of 7-d-old plants. Bar = 20  $\mu$ m.**



**Figure S4. Additional data for genetic interaction between *CSN5A* and *SMAP1*.**

**(A)** Root length of 7-d-old light-grown seedlings grown on GM without growth regulators. Data are mean  $\pm$  SD ( $n$  = at least 13 seedlings).

**(B)** Photographs of 3-d-old dark-grown seedlings grown on GM without growth regulators. Bar = 1 mm.

**(C)** Height of adult plants shown in Figure 7E. Data are mean  $\pm$  SD ( $n$  = > 9 plants).