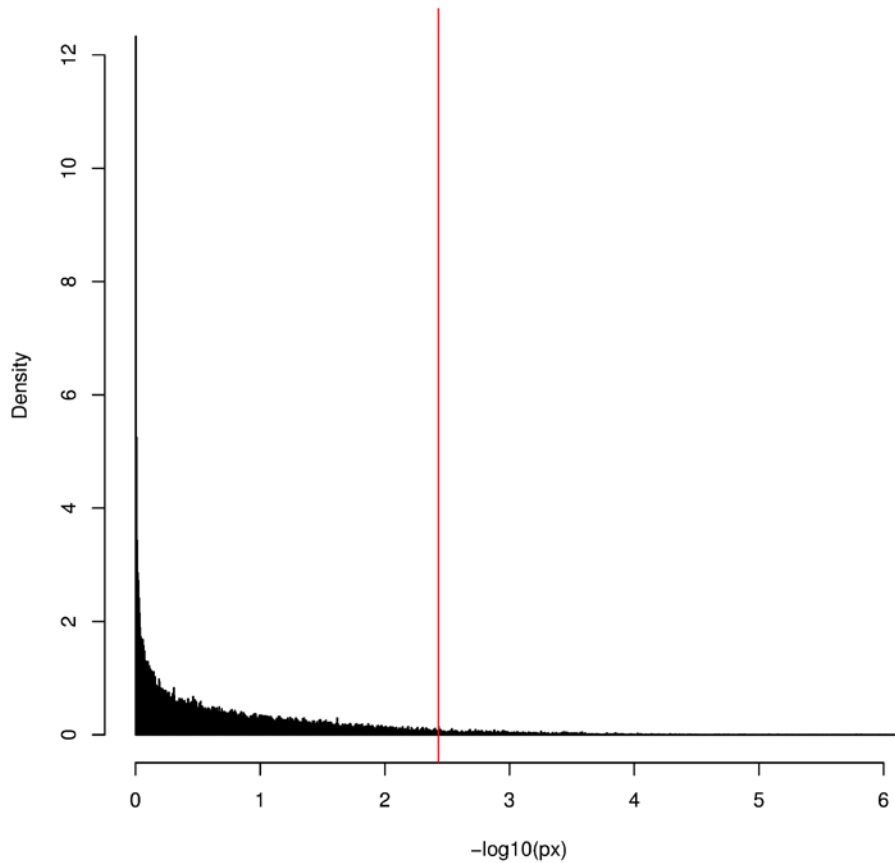


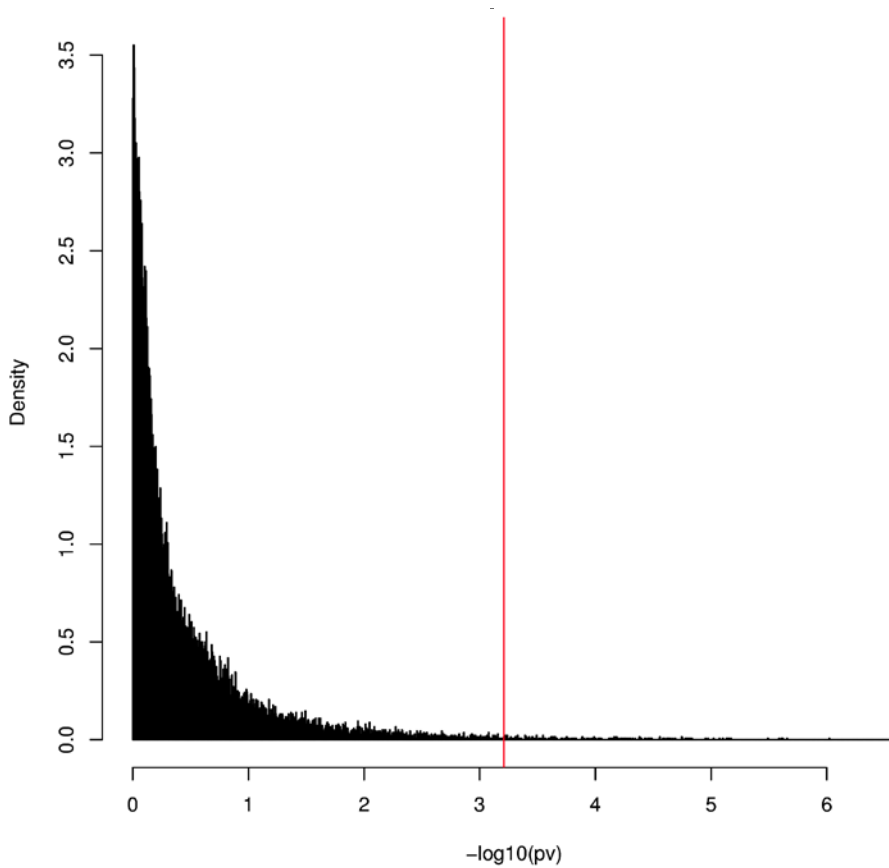
Supplemental Figure 1.

Plot of normalized ratios. The 256 loci which had mean normalized ratios greater than 2 in each of three experiments were plotted: pollination (black), pollen coat (red), Experiment 1 (circles), Experiment 2 (triangles), and Experiment 3 (crosses). The location of one of these loci, target *ACA13*, is indicated by a vertical line. There is a monotonic trend in the Experiment 3 data of pollination, indicated in blue.



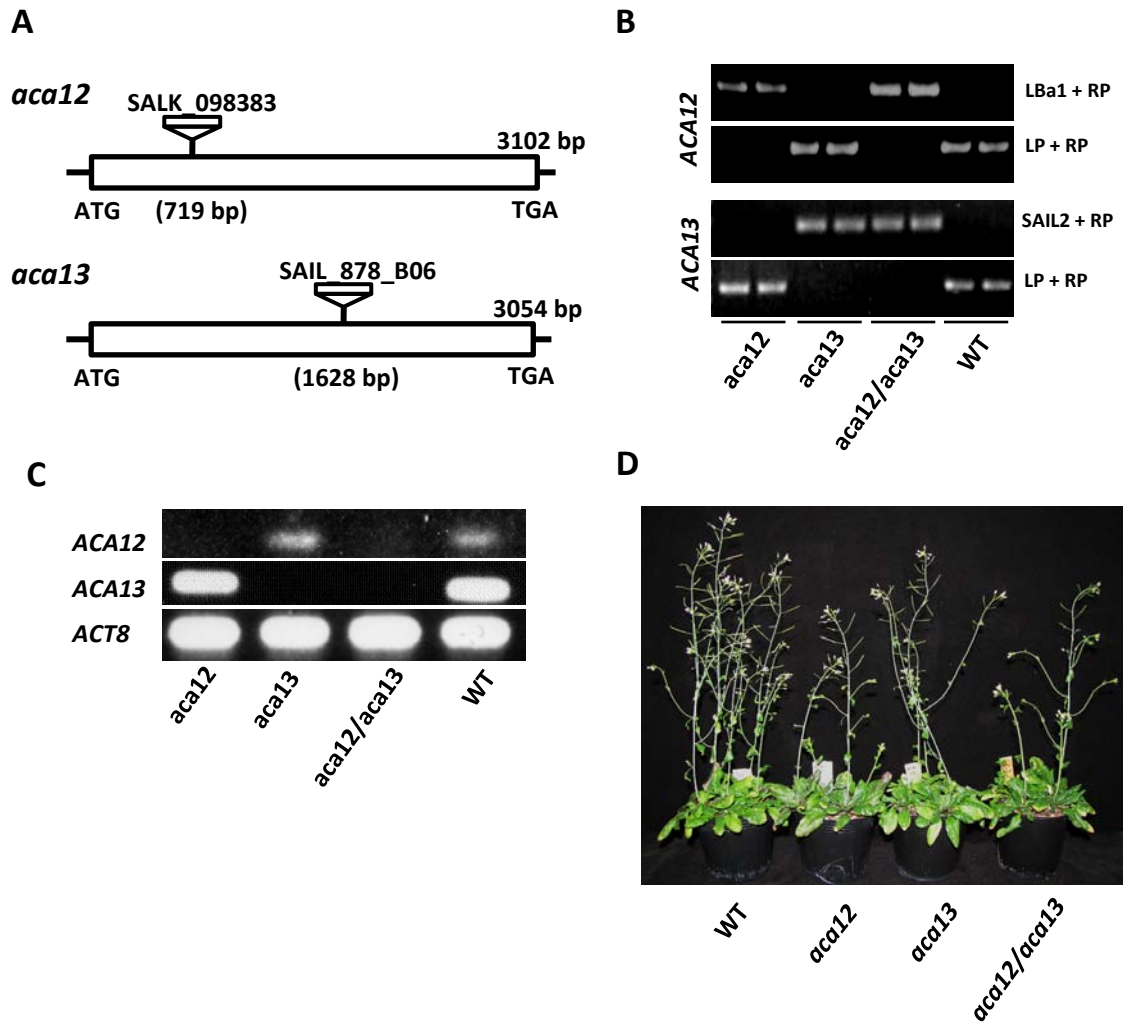
Supplemental Figure 2.

Histogram of P values for 27,205 loci according to a paired t -test. P values are expressed as the negative common logarithm ($-\log_{10}$); a larger value means higher significance. The vertical red line indicates the P value for *ACA13*.



Supplemental Figure 3.

Histogram of P values for 27,205 loci according to ANOVA. P values are expressed as the negative common logarithm ($-\log_{10}$). The vertical red line indicates the P value for ACA13.



Supplemental Figure 4.

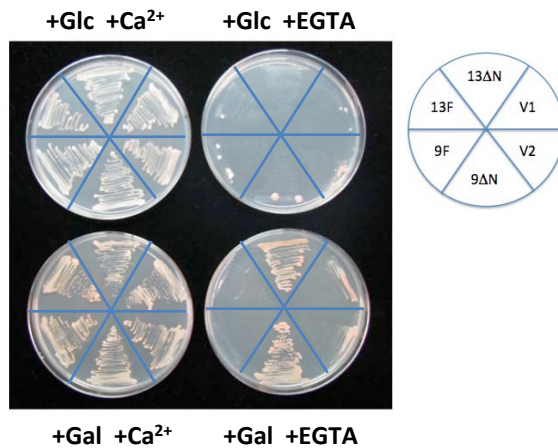
T-DNA mutants of *ACA12* and *ACA13*.

(A) Positions of T-DNA insertions in *aca12* and *aca13*.

(B) Homozygous insertions in *aca12*, *aca13* and *aca12/aca13* plants were checked by PCR. Bands generated by primer pairs LBa1 and RP (for *ACA12*) or SAIL2 and RP (for *ACA13*) represent T-DNA insertions, and bands generated by LP and RP primer pairs indicate no insertions.

(C) RT-PCR shows that expression of genes deleted in the mutants was abolished.

(D) WT, single and double *aca12* and *aca13* mutant plants.



Supplemental Figure 5.

Complementation of yeast K616 by ACA13-Venus.

Growth of *Saccharomyces cerevisiae* mutant K616 (*pmc1pmr1cnb1*), on medium containing either galactose (Gal) or glucose (Glc) and either CaCl₂ or EGTA, was complemented with *GAL1:ΔN-ACA13-Venus* and *GAL1:ΔN-ACA9* in the pYES2 vector.

V1, *GAL1:Venus* in pYES2; V2, pYES2 empty vector; 13ΔN and 9ΔN, either *GAL1:ΔN-ACA13-Venus* or *GAL1:ΔN-ACA9* in pYES2; 13F and 9F, either *GAL1:ACA13-Venus* or *GAL1:ACA9* (full-length) in pYES2.