

Figure S1 CRFs expression pattern in pistil and ovule primordia.

(A,B,C) CRF2 expression pattern detected using pCRF2::3xGFP is visible in the carpel margin meristem and in the developing valves of stage 9 pistil (A), at the base of emerging ovule primordia stage 1-II (B) and in the developing vasculature of ovule at stage 2-I (C). (D,E) pCRF6::GUS shows a gradient of expression from the tip to the bottom of all tissues of stage 9 pistil; (F) GUS signal driven by the promoter of CRF6 is also strongly expressed at the base and in the developing vasculature of ovules at stage 2-I. (G,H) on the contrary pCRF3::GUS is not expressed at early stage of pistil and ovule development. cmm: carpel margin meristem; op: ovule primordia stage 1-II, ov: ovule stage 2-I, v: valve. Scale bars= 20μm.

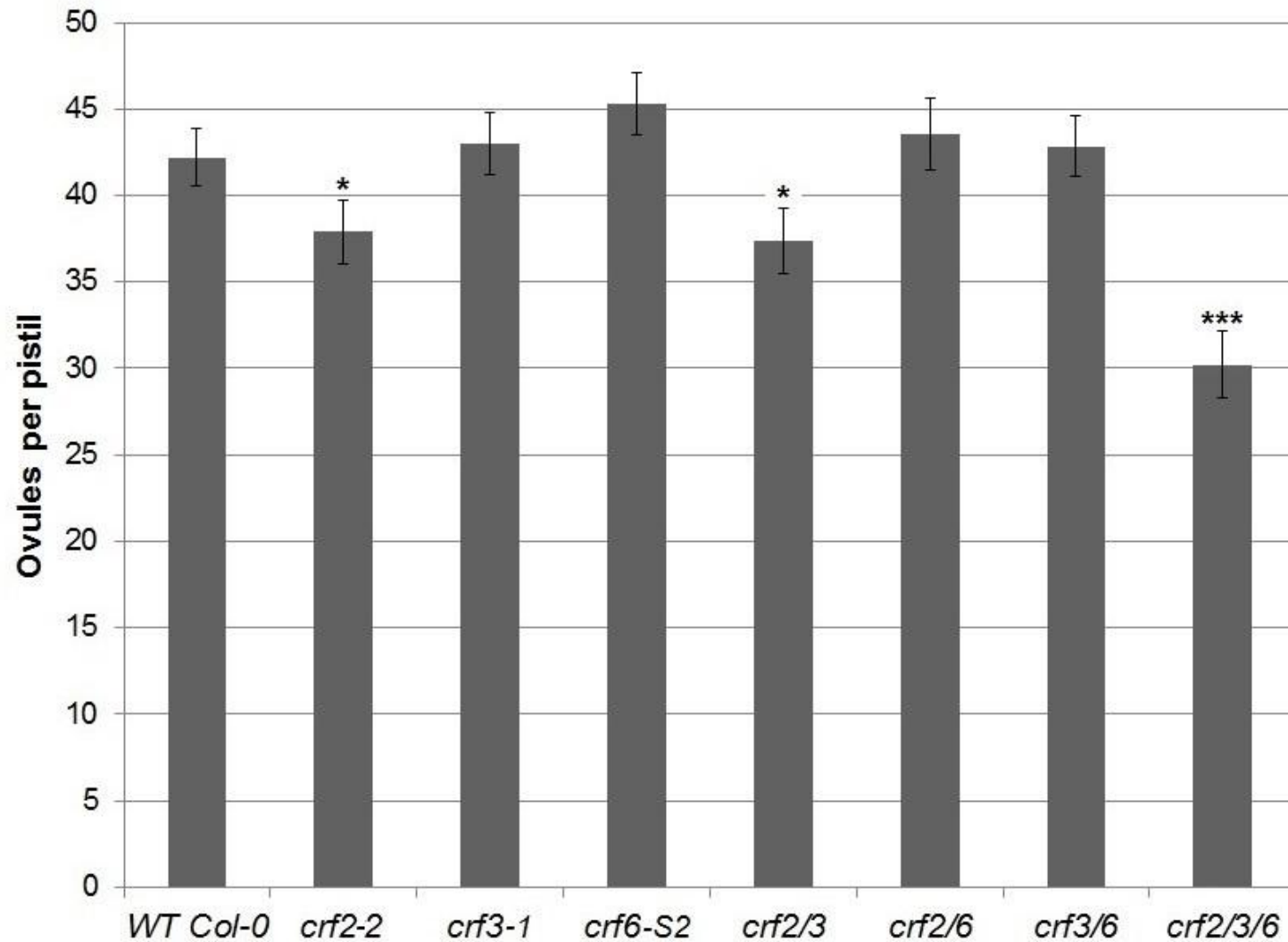


Figure S2 Ovule number per pistil in several *crf* mutant combinations.

Number of ovules in *wild-type col-0*, *crf2-2*, *crf3-1*, *crf2-2 crf3-1 (crf2/3)*, *crf2-2 crf6-S2 (crf2/6)*, *cr3-1 crf6-S2 (crf3/6)* and *crf2-2 crf3-1 crf6-S2 (crf2/3/6)*.

Student's t-test (* $p < 0,05$; *** $p < 0,001$; $n = 20$).

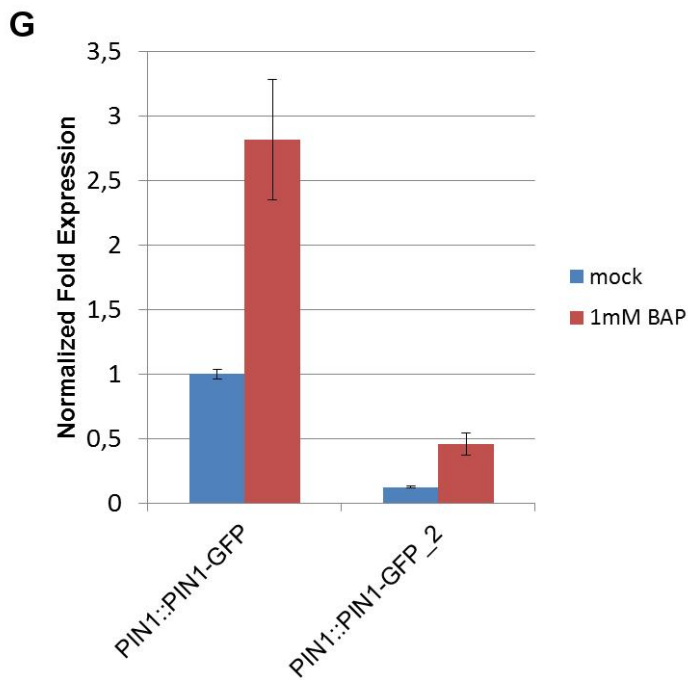
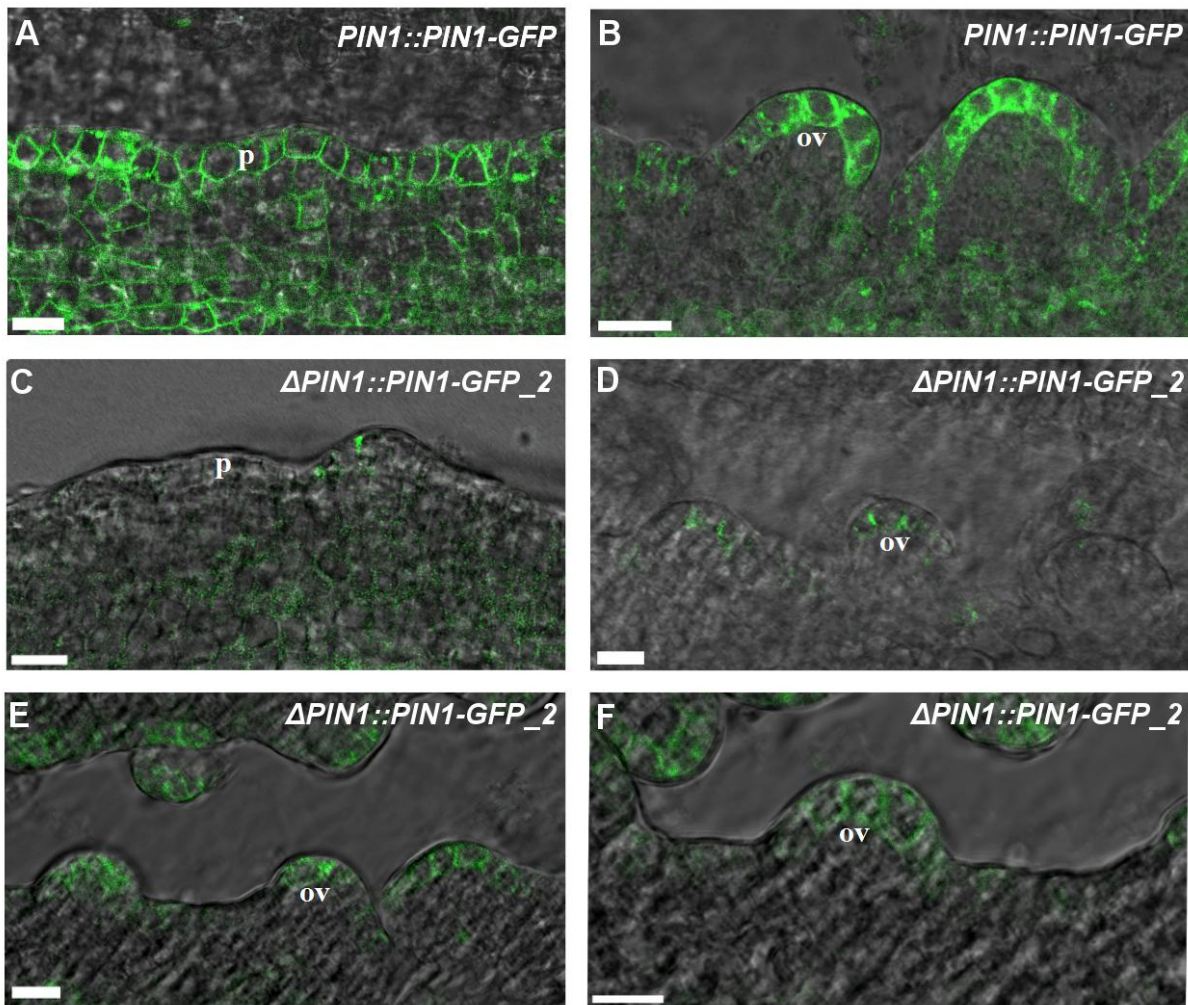


Figure S3

Confocal microscope images of *PIN1::PIN1-GFP* (A,B) in placenta cells (A) and ovule primordia (B). (C,D,E,F) Images of Δ *PIN1::PIN1-GFP line 2* placenta cells (C) and ovule primordia at stages 1-I (D,E,F). Scale bars = 10 μ m. ov: ovule primordia; p: placenta.

(G) GFP expression levels in mock and BAP-treated *PIN1::PIN1-GFP* and Δ *PIN1::PIN1-GFP line 2* pre-fertilization inflorescences. The data were normalized with respect to ACT8-2 and UBI10 mRNA levels.

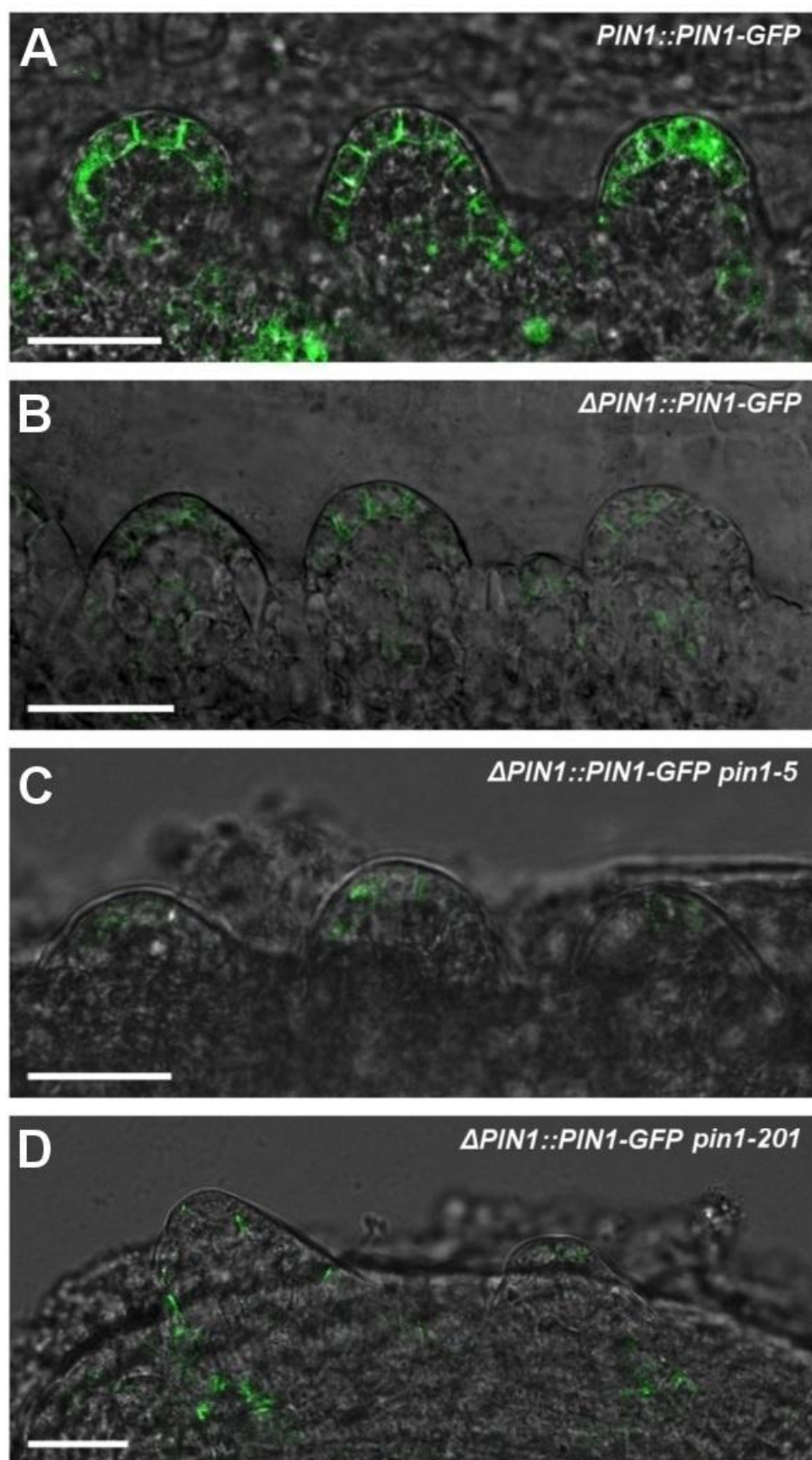


Figure S4 Confirmation of the presence of Δ *PIN1::PIN1-GFP* in *pin1* mutants.

Confocal microscope images of *PIN1::PIN1-GFP*, Δ *PIN1::PIN1-GFP* and Δ *PIN1::PIN1-GFP* in the *pin1-5* and *pin1-201* mutant backgrounds. The fluorescence intensity of PIN1-GFP in Δ *PIN1::PIN1-GFP* wild-type background ovules (B) is comparable to that seen for PIN1-GFP in Δ *PIN1::PIN1-GFP pin1-5* (C) and Δ *PIN1::PIN1-GFP pin1-201* (D) ovule primordia, and is considerably lower than that in *PIN1::PIN1-GFP* ovules (A).



Figure S5 Phenotype *pin1-201* mutant plants

(A) Note the complete absence of lateral branches and flowers on the *pin1-201* stem. (B) *pin1-201* inflorescence apex.