

Figure S1 : Effect of prolonged moderate high temperature on PIN2 abundance in *act8-2* roots. Five-day-old light grown seedlings were transferred to new agar plates and subjected to high-temperature treatment (29° C) for 72 hours before imaged with confocal microscopy using the same confocal settings. Images are representative of 15 to 20 seedlings obtained from three independent experiments. Bars = 50 µm.

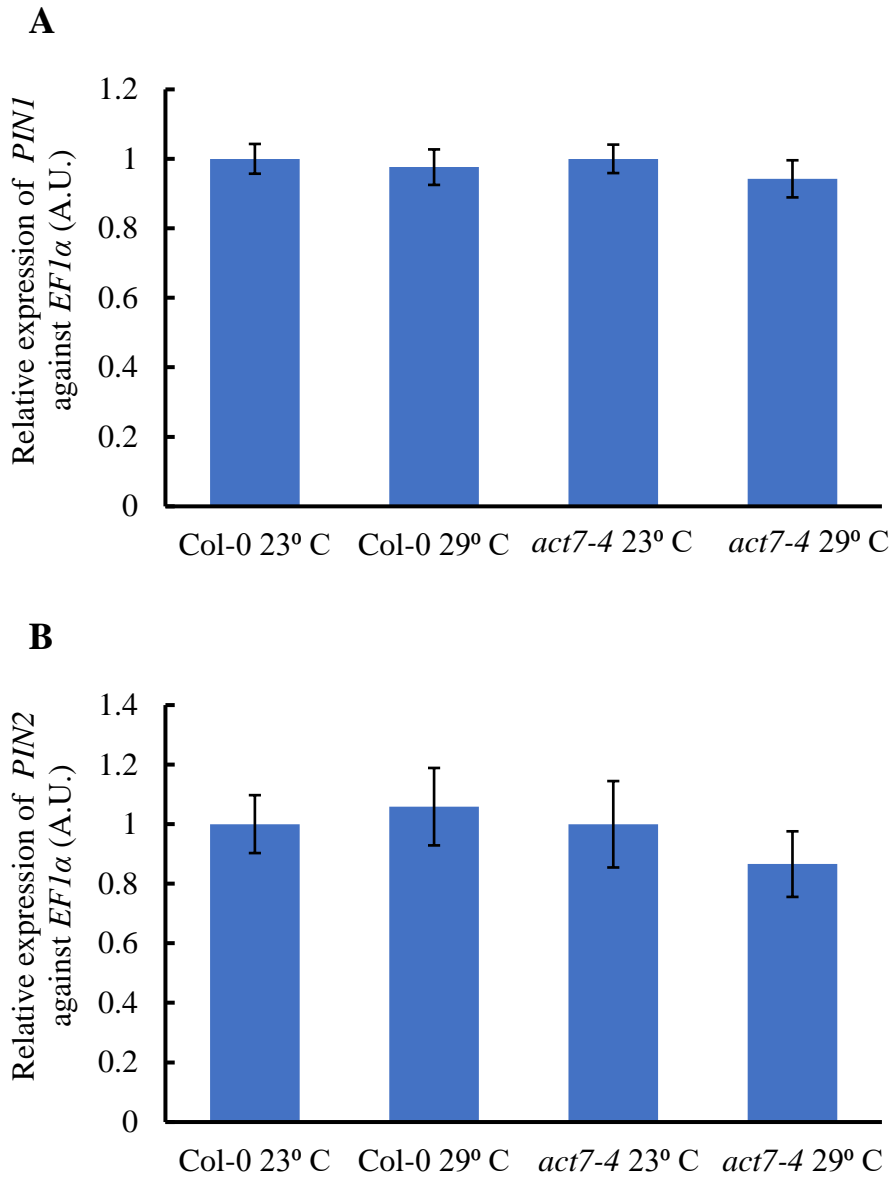


Figure S2. Expression of *PIN1* and *PIN2* are not changed at transcriptional level under prolonged moderate high temperature in Col-0 and *act7-4*.

(A) *PIN1* expression under prolonged high temperature in Col-0 and *act7-4*. (B) *PIN2* expression under prolonged high temperature in Col-0 and *act7-4*.

Five-day-old light grown seedlings were transferred to new agar plates and subjected to high-temperature treatment (29° C) and control (23° C) for 72 h before collecting RNA for semi-quantitative RT-PCR analysis. All the data were normalized against *EFL1α*. The data were obtained from three biological replicates. Vertical bars in the graph represent mean \pm SE.

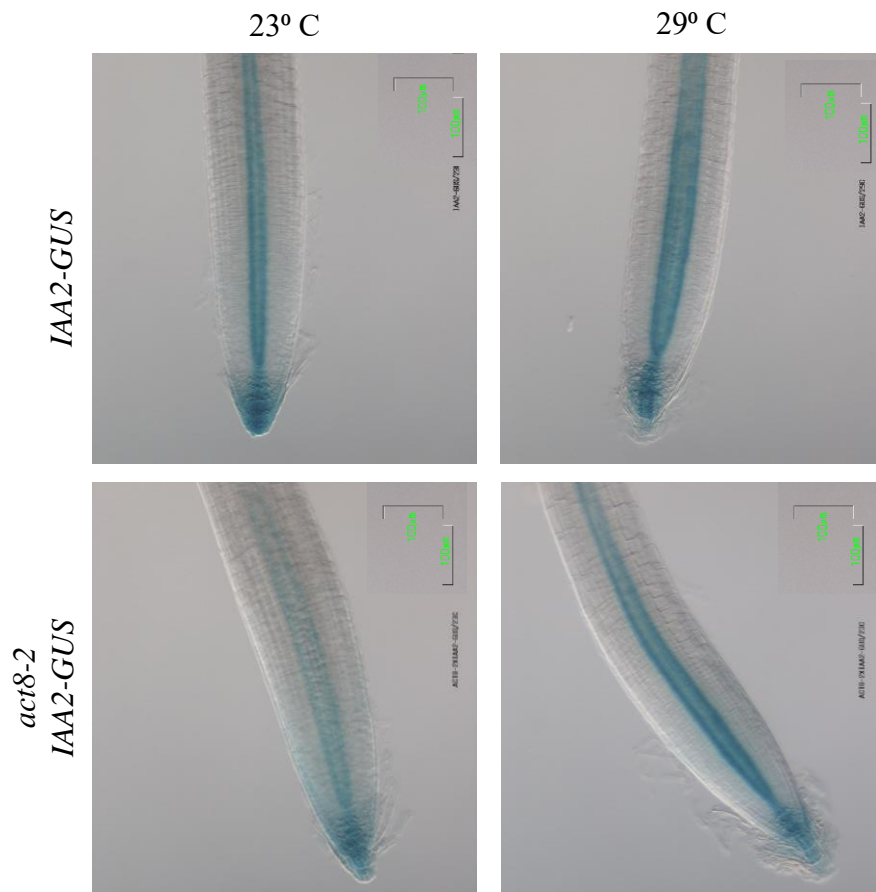


Figure S3. Auxin distribution in *act8-2* roots under prolonged moderate high temperature. Five-day-old *IAA2-GUS* and *act8-2 IAA2-GUS* seedlings were transferred at 23° C and 29° C for 72 hours. Seedlings were stained in a buffer containing 1 mM X-gluc for 1 h at 37° C and cleared for photography. These are representative images stained in at least three separate experiments. Bars = 100μm.

Table S1. Primer list used to perform PCR.

| PRIMER | SEQUENCE |
|---------------------------------|----------------------|
| <i>PIN1</i> F | ATCTTCACATGTTTGTGTGG |
| <i>PIN1</i> R | TCGTCTTTGTTACCGAAACT |
| <i>PIN2</i> F | GGAGACGGCTGGTTCAATTA |
| <i>PIN2</i> R | ACCACCACGTGTAGCTTTCC |
| <i>EF1α</i> F | CTTGCTTTCACCCTTGGTGT |
| <i>EF1α</i> R | TCCCTCGAATCCAGAGATTG |