

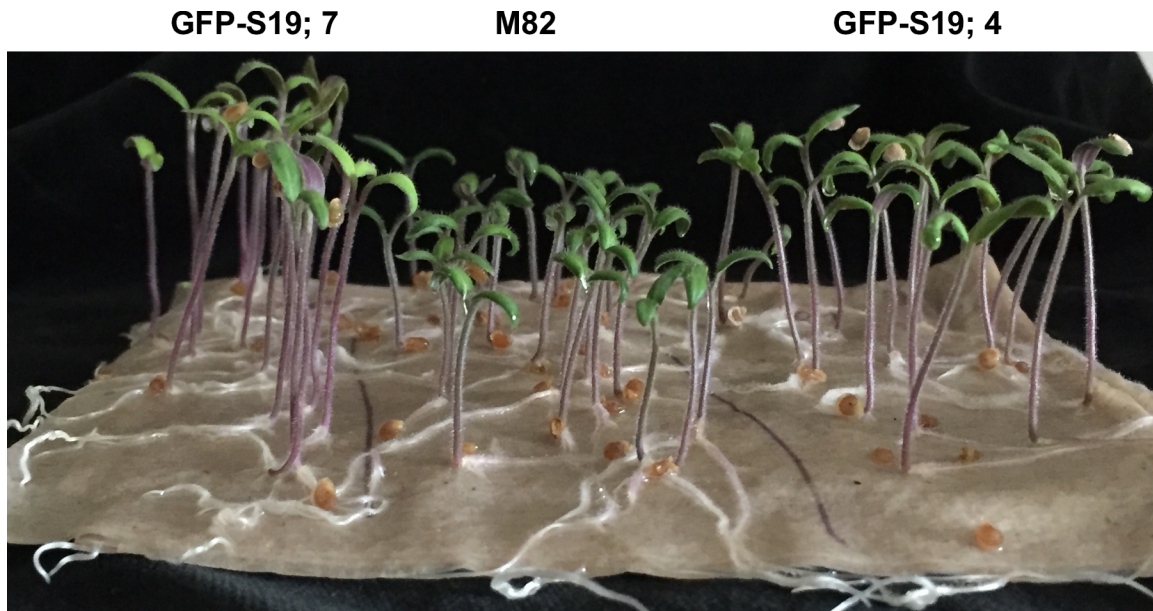
SUPPLEMENTAL DATA

Constitutive *AtSAUR19* expression confers auxin-independent hypocotyl elongation in *Arabidopsis* and tomato

Angela K. Spartz¹, Vai S. Lor¹, Hong Ren¹, Neil E. Olszewski¹, Nathan D. Miller², Guosheng Wu², Edgar P. Spalding², and William M. Gray^{1*}

Supplemental Table 1. Primers used in this study

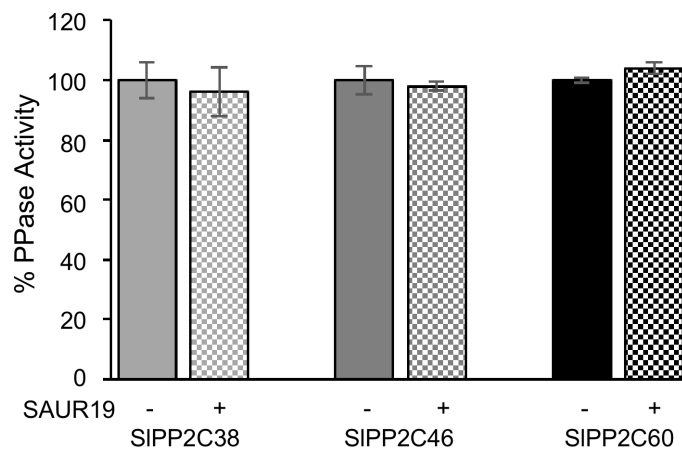
qPCR	
SAUR19-UTR-F	cttcaagagcttcataataattcaaactt
SAUR19-UTR-R	gaaggaaaaaatgttgatcatct
SAUR9-F232	TCAACACCGAAGTCGCTATG
SAUR9-R315	TCGTGCTCGAAACCAAACCTC
SAUR20-UTR-F	aacttgaatcttttcatacatcttcag
SAUR20-UTR-R	taactaggaagaaaaatgttggtca
SAUR21-UTR-F	taagcttcaaaaaccttttcgtaca
SAUR21-UTR-R	ccaaatgtcggatcatcatgaTCA
SAUR23-UTR-F	tttcagacaaaagaaATGGCTTTGG
SAUR23-UTR-R	acaaggaaacaactctatctctaact
ACT7-F	GAGAAGATGACTCAGATC
ACT7-R	ATCCTTCCTGATATCGAC
SIPP2C cDNA	
SIPP2C38-F	CAC CAT GGT GAC AAG TAC ATG GAA AAA G
SIPP2C38-R	TCA AGG GCC TCC TCC GCC TC
SIPP2C42-F	CAC CAT GAA TTT CCT TCC AAG ATG TTT G
SIPP2C42-R	TCA GTG TTC TAA AGC ACT CCG
SIPP2C46-F	CACCATGACATCTGGATTGATGAACTTC
SIPP2C46-R	TTATGTTGGGGTAGTCTTTGTAGG
attb1 SIPP2C60-F	GGG GAC AAG TTT GTA CAA AAA AGC AGG CTG CAT GTT ATC AAG GCT GAT AAA TTT CC
attb1 SIPP2C60-R	GGG GAC CAC TTT GTA CAA GAA AGC TGG GTC TTA AGT GGT ACC GAG TTC TAT GGG



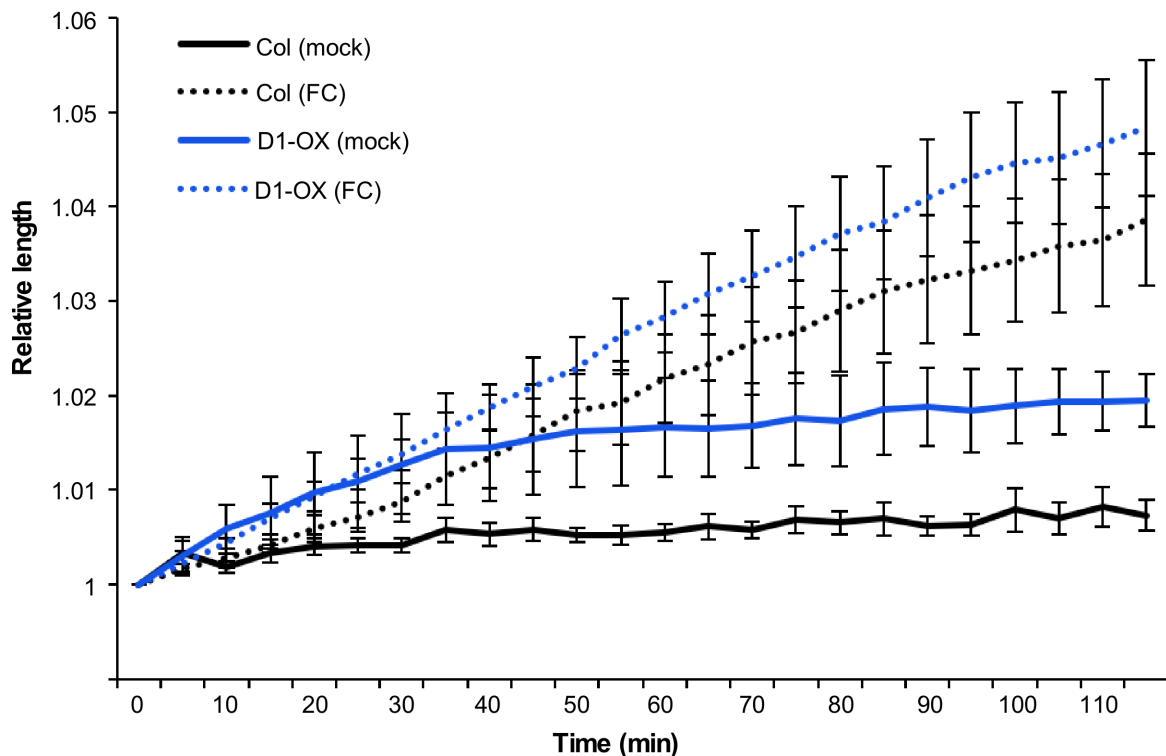
Supplemental Figure 1. 35S:GFP-AtSAUR19 expression confers a long hypocotyl phenotype. Wild-type M82 and two GFP-AtSAUR19 transgenic lines were grown for 8 days under long-day (16:8) lighting.



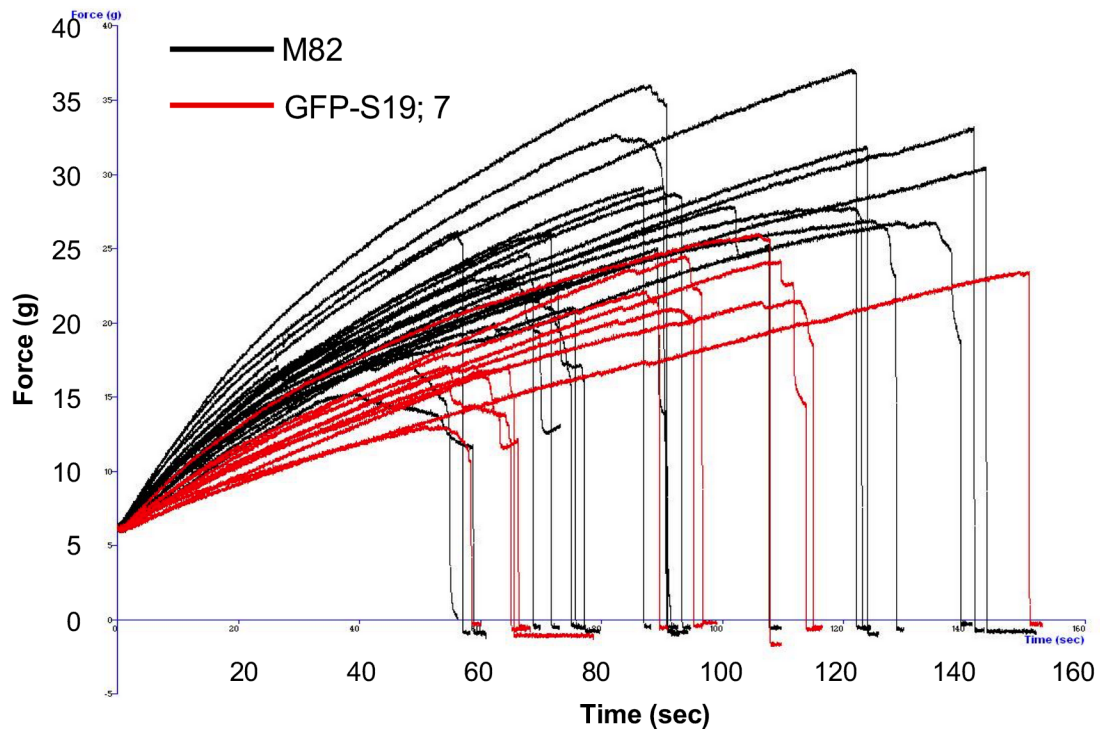
Supplemental Figure 2. 35S:GFP-AtAUR19 expression confers drought hypersensitivity. **A)** M82 and GFP-AtSAUR19 plants were removed from the growth chamber (70% relative humidity) and incubated at ambient humidity for 1 h. Arrowheads indicate leaf curling upon exposure to lower humidity. **B)** M82 and GFP-AtSAUR19 plants after withholding water for several days.



Supplemental Figure 3. SIPP2C38, 46, or 60 pNPP phosphatase assays with AtSAUR19. 6xHis-SIPP2C.D proteins were purified from *E. coli* and tested in phosphatase assays employing pNPP. Values indicate the mean relative activities \pm SD of three assays.



Supplemental Figure 4. Fusicoccin promotes elongation of 35S:AtPP2C.D1 hypocotyl segments. Hypocotyl segments from etiolated Col or 35S:PP2C.D1 (D1-OX) seedlings were incubated for 30 min on auxin depletion medium and then transferred to plates containing 1 μ M fusicoccin (FC). Data points represent the mean relative segment length \pm SE from 3 independent assays, each containing 4-7 hypocotyls/genotype/treatment.



Supplemental Figure 5. Raw TA.XTplus data. Each line represents the force curve obtained from an individual M82 (black) or GFP-AtSAUR19 (red) hypocotyl.