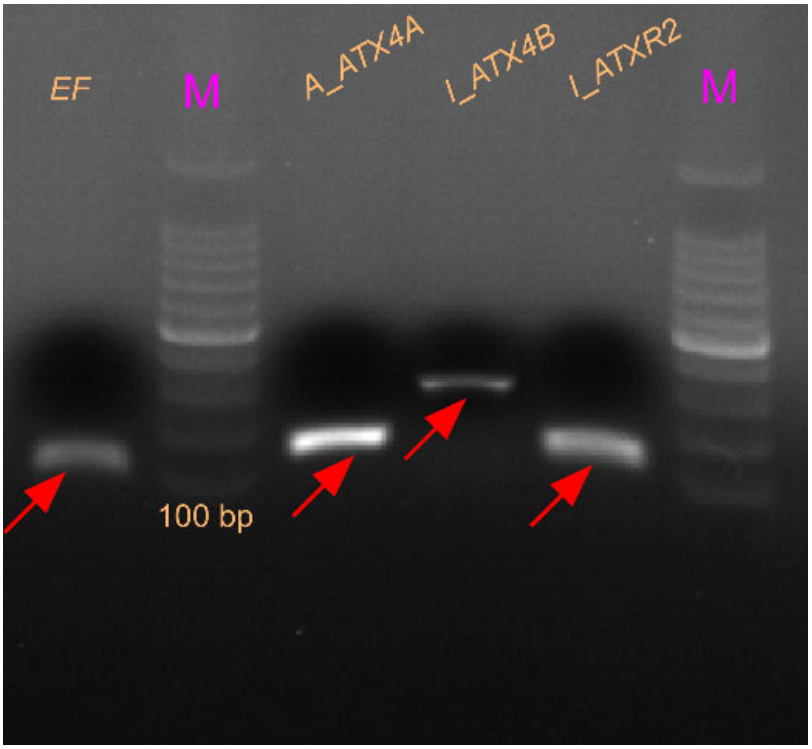
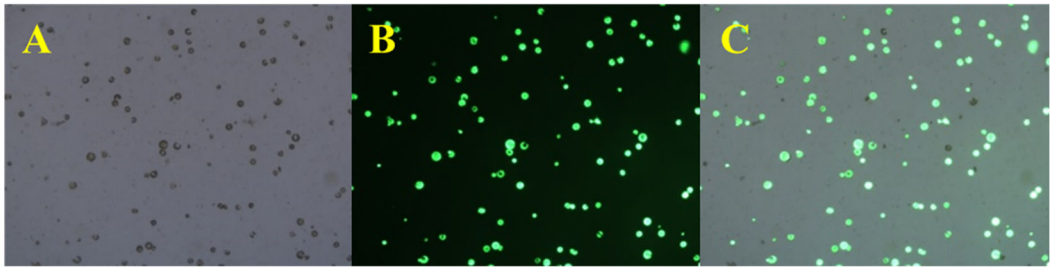
Supplementary Table S1. List of genes, designed primers, and amplicon characteristics.

Gene name	Reference sequence accession	Arabidopsis TAIR accession	Tblastx e-value	Primer sequences (Forward/ Reverse) (5′--- 3′)	Tm (°C)	Amplicon Length (bp)
Elongation factor 1-alpha (EF1)	Peaxi162Scf00351g00412.1	AT5G60390.1	0.0	CCTGGTCAGATTGGAAATGG / CAGATCGCCTGTCAATCTTGG	60	103
ARABIDOPSIS TRITHORAX-RELATED 2 (I_*ATXR2*)	Peinf101Scf00264g06027.1	AT3G21820.1	0.0	CTTCAAATAAGGTTGACTGTTTGG / CACTGTTTTGGGAGACACCA	60	116
ARABIDOPSIS TRITHORAX 4a (A_*ATX4A*)	Peaxi162Scf00550g00547.1	AT4G27910.1	4e-32	TGGACCACAGAAAGGTGTGC/ CTGCAGACCCATGAAGTGAA	62	145
ARABIDOPSIS TRITHORAX 4b (I_ATX4B)	Peinf101Scf02092g02028.1	AT4G27910.1	1e-22	GGACCAATGGCTTTCCGGT/ TTC ACATGCTCGGCAGACC	62	264



Supplementary Figure S1. Agarose gel electrophoresis of qRT-PCR amplicons for reference and target genes from *Petunia x hybrid*. Arrows indicate the bands amplified by designed primers. *EF* reference gene of *elongation factor 1*; *M* DNA ladder; *A_ATX4A*, *I_ATX4B*, and *I_ATXR2* target genes.



Supplementary Figure S2. Fluorescence microscope images collected from purified protoplast of CPW 25% sucrose solution mixed with 0.01% FDA solution. A: Protoplast stained by FDA in white light. B: Protoplast stained by FDA in green light. C: Combined A and B.