

Transcriptome Analysis of Eggplant under Salt Stress: AP2/ERF Transcription Factor *SmERF1* Acts as a Positive Regulator of Salt Stress

Figure S1

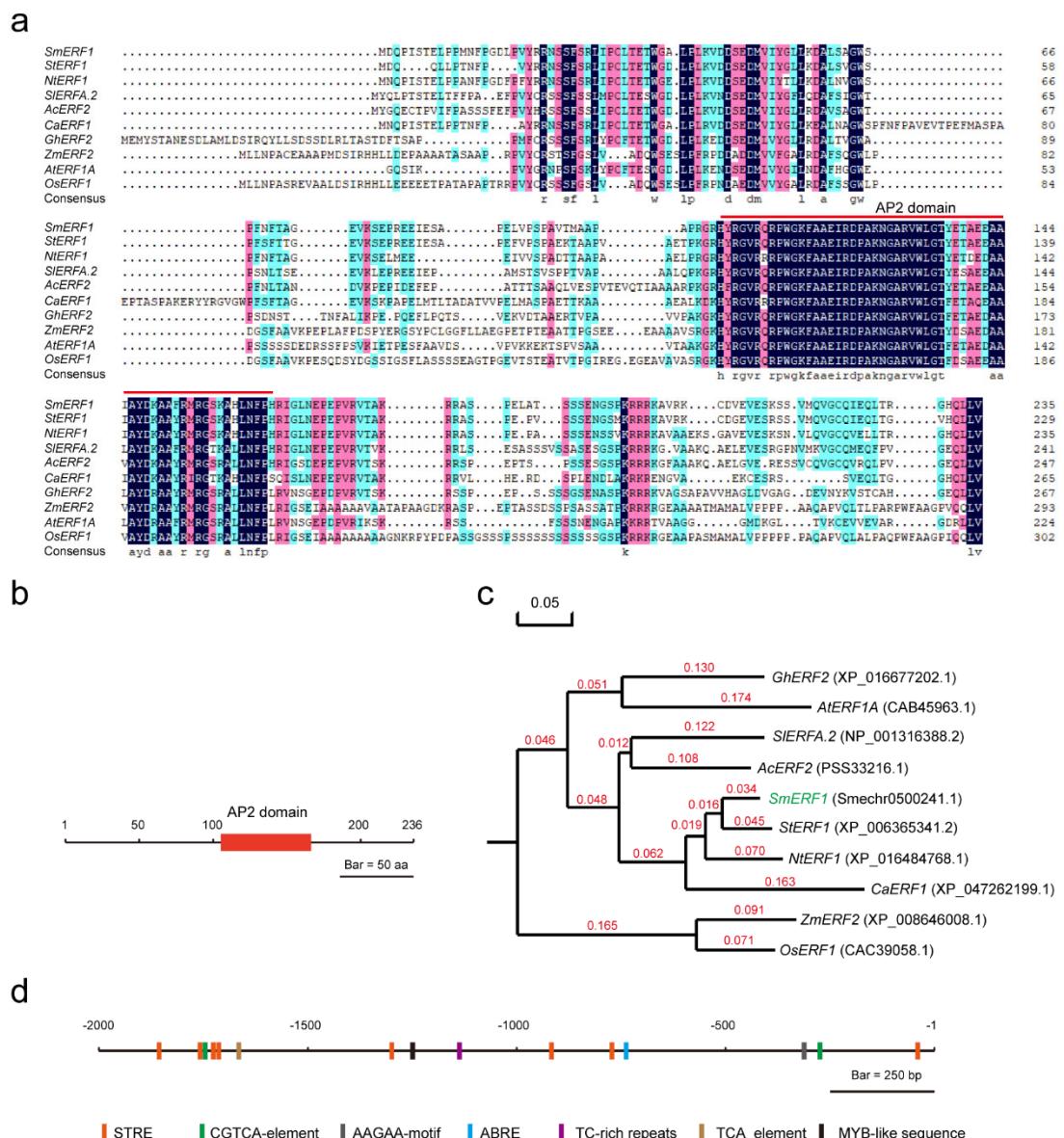
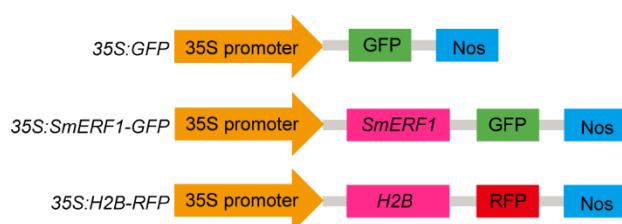


Figure S1. Sequence structure and comparison of *SmERF1*. (a) Multiple comparison of *SmERF1* amino acid sequence with its homologs in other plant species using DNAMAN 7.0 (Lynnon Biosoft). *StERF1* (*Solanum tuberosum* ERF1, XP_006365341.2), *NtERF1* (*Nicotiana tabacum* ERF1, XP_016484768.1), *SIERFA.2* (*Solanum lycopersicum* ERFA.2, NP_001316388.2), *AcERF2* (*Actinidia chinensis* var. *chinensis* ERF2, PSS33216.1), *CaERF1* (*Capsicum annuum* ERF1, XP_047262199.1), *GhERF2* (*Gossypium hirsutum* ERF2,

XP_016677202.1), ZmERF2 (Zea mays ERF2, XP_008646008.1), AtERF1A (Arabidopsis thaliana ERF1A, CAB45963.1), and OsERF1 (Oryza sativa ERF1, CAC39058.1). Wathet blue shading indicates 50% to 75% identity, solferino shading indicates 75% to 100% identity, and black shading indicates 100% identity. The red line denotes the location of AP2 domain. (b) Schematic diagram of *SmERF1* amino acid sequence harboring a conserved AP2 domain. The red box indicates the AP2 domain. aa, amino acid. (c) Phylogenetic tree of *SmERF1* and its homologs. Red numbers indicate branch length. (d) Diagram of cis-elements within the *SmERF1* promoter. The main cis-elements include seven stress response elements (STRE) (orange boxes), two methyl jasmonate response elements (CGTCA-element) (green boxes), one cis-element involving abscisic acid response (AAGAA-motif) (gray box), one abscisic acid responsiveness element (ABRE) (blue box), one defense and stress responsiveness element (TC-rich repeats) (purple box), one salicylic acid responsiveness element (TCA-element) (brown box), and one MYB transcription factor binding site (MYB-like sequence) (black box).

Figure S2

a



b

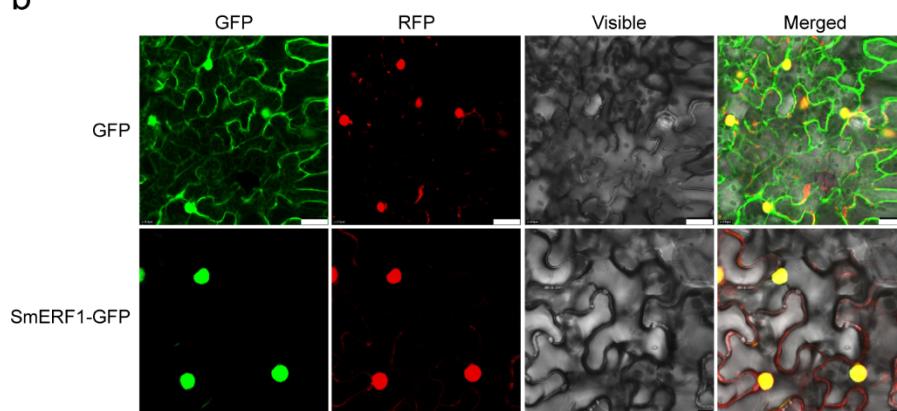


Figure S2. Subcellular localization of *SmERF1*. (a) Schematic diagram of pBinGFP2 and recombinant pBinGFP2-*SmERF1* vector. (b) Subcellular localization of *SmERF1*-GFP or GFP in epidermal cells of *Nicotiana benthamiana* leaves at 48 h post-infiltration observed under laser scanning confocal microscope. Scale bar = 25 μ m. GFP, green fluorescence protein; RFP, red fluorescence protein.