**Fig. S3.** Expression of well-known stress response genes in different genetic backgrounds and stress conditions: semi-quantitative RT-PCR analysis. RNA was extracted from two-week-old vector (v) control, EARLI1 overexpressing (ox) line #2-1, and earli1-1 knockout (ko) line Sail_86_A06 plants grown on agar plates at 22°C (control), 10°C (cold), 150 mM NaCl (salt), or 2 μM abscisic acid (ABA). EARLI1a: expression levels of both the endogenous gene and the ox transgene; EARLI1b: expression levels of the endogenous gene only. AZI1 is the EARLI1-related HyPRP gene At4g12470; ACTIN 8 (ACT8) was used as loading control. The RT-PCR reactions were repeated 3 times with similar results as shown here.

**Methods:** Total RNA was isolated using Trizol according to the manufacturer’s instructions (Invitrogen, Carlsbad, CA) from two-week-old Petri dish grown plants exposed to various stress treatments (22°C controls; 10°C; 150 mM NaCl; 2 μM ABA). RT reactions to produce first-strand cDNA were done in a total volume of 20 μl using 2 μg of total RNA, 100 pmols of the primer GGCCACGCGTCGACTACT17, and 200 units of Moloney Murine Leukemia Virus (MLV) RT (Promega, Madison, WI). PCR reactions were done in 25 μl using 1 μl of 5-fold diluted first-strand cDNA reaction product, 0.25 units of JumpStart REDTaq DNA polymerase (Sigma, St. Louis, MO) and the following primer pairs and cycle numbers in the linear range of amplification: ACT8 (25 cycles), ATG AAG ATT AAG GTC GTG GCA and TCC GAG TTT GAA GAG GCT C (intron spanning); KIN1 (24 cycles), ATG TCA GAG ACC AAC AAG AAT GCC and CCG AAT CGC TAC TTG TTC AGG C (intron spanning; Bubier et al. 2004); RD29A (28 cycles), CGA TGC ACC AGG CGT AAC AGG and CCA GCT CAG CTC CTG ACT GTT C (intron spanning; Zaleiski et al. 2006); COR15 (28 cycles), AGA TTT CGT GAC GGA TAA AA and TGT GAC GGT GAC TGT GGA TA (Wilkosz and Schläppi 2000); P5CS1 (24 cycles), CAC GGT CAT TCA ACC ATG AG and CCT CTG CAC CAA GTC CAA AT (intron spanning; Mattioli et al. 2008); RAB18 (28 cycles), TTG GGA GGA ATG CTT CAC C
and TTG TTC GAA GCT TAA CGG C (intron spanning; Zalejski et al. 2006); RD22 (25 cycles), GCA GCG AAG GAG ACT CAG CT and GTT CCA AGC TGA GGT GTT CT (intron spanning; Cho et al. 2008); ERLI1a (26 cycles), CCA AGC CGG TCC CAA GTC CC and GGC CAC GCG TCG ACT AC (3’-RACE primer); ERLI1b (28 cycles), CTC TCA CTC TCT CAA AGA CAC TG and GAG TAC AAA ATC TCT TTT ATT AAA CGG GT; AZI1 (26 cycles), CCG GTC ACA CCT CCA CGC AC and GGC CAC GCG TCG ACT AC (3’-RACE primer). The reactions were repeated 3 times with similar results.

References:


