Figure S13. Knockdown of RPS17 expression in rps17 mutant plants leads to heat susceptibility.

(A) Schematic diagram of RPS17 gene (At1g79850) showing the T-DNA insertion site. Open box indicates 5’ or 3’ UTR; Closed box indicates ORF. The T-DNA insertion site and positions of the start and stop codons are indicated (SALK_066943).

(B) RPS17 mRNA levels in leaves of wild type and rps17 mutant plants were analyzed by qRT-PCR. Actin2 was used as the internal standard.

(C) Western blot analysis of thylakoid membrane proteins extracted from WT and rps17 leaves. Equal protein loading was determined by contents (2 μg) of chlorophyll in thylakoid membrane extracts according to (Peng et al., 2006).

(D) to (E) Heat-challenged phenotypes of wild type and rps17 mutant as examined with detached leaf (D) and whole plant (E) assays performed as described in Methods.

(F) qRT-PCR analysis of mRNA levels of HsfA2 in detached, fully-extended WT and rps1 leaves challenged with heat treatment (38°C) for the indicated time in dark. For qRT-PCR analysis, Actin2 was used as the internal standard. Error bars indicate standard deviations of three technical replicates, and the results were consistent in three biological replicates.