

Description of Additional Supplementary Files

Supplementary Data 1: List of proteins that are accumulated in *atprmt3-2*, and suppressor *atprmt3pdcd2-d1 (m20)* compared with Col-0 in nucleus.

Supplementary Data 2: List of genes that are differentially expressed in *atprmt3-2*, and suppressor *atprmt3pdcd2-d1 (m20)* compared with Col-0.

Supplementary Data 3: List of genes with differentially expressed TE in *atprmt3-2*, *rps2a2b-1* mutants excluding *rps2c-1* mutants compared with Col-0.

Supplementary Data 4: List of genes that are cold induced. Col-0 plants were treated at 4°C for 0 and 24 hours, and then subjected for RNA-seq analysis.