**Table S1. Primers and oligonucleotides used in this study**

|  |  |
| --- | --- |
| Name | Sequence |
| Primers used for *ire1a* gene genotyping |
| IRE1A(GT) FWIRE1A(GT) RVSALK(GT) RV | ATCGTCCACTTACACGAATTGGGAATAGTTTTTTGCGAGATCAATCAGTCCTATTTTTGAACACTCAACCCTATCTCGGGCTATTCTTTT |
| Primers used for *ire1b* gene genotyping |
| IRE1B(GT) FWIRE1B(GT) RVGABI(GT) FW | CAAAGTTTGGAGATGTTTTGTGGAGTGTTTATATCACAGTCTCAGGAAGAGGAAGGGAGATCTCCATATTGACCATCATACTCATTGCTG |
| Primers used for *ire1c* gene genotyping |
| IRE1C(GT) FWIRE1C(GT) RVSALK(GT)2 RV | TGCTTACATTTGTCTAGAGCCTTGGAAATGCAGTTAGCATTGGAGTTAGAGGTAATGGCTTCCGCGTGGACCGCTTGCTGCAACTCTCTCAGG |
| Primers used for *BiP3* probe amplification |
| BiP3 probe FWBiP3 probe RV | ACAAACGAGATCGAAGAAGAGTTCTCACCGTCCCCAGTTTCTGCTCTTCGC |
| Primers used for *PR-4* probe amplification |
| PR-4 probe FWPR-4 probe RV | TCTGCTGCAGTCAGTACGGTTAGCTGCATTGGTCCACTATTCTC |
| Primers used for *PRX34* probe amplification |
| PRX34 probe FWPRX34 probe RV | TATGCTCACCATTGCAGCTCTGGTCGCTCTGGATAAGACC |
| Primers used for *MBL1* probe amplification |
| MBL1 probe FWMBL1 probe RV | GATTCTCCCACCGACACACTCGTGTATGTCACGTCCCAAG |
| Primers used for RT-PCR of *bZIP60s* mRNA (Deng *et al*, 2011) |
| bZIP60F4b60SB2 | GAAGGAGACGATGATGCTGTGGCTAGCAGGGAACCCAACAGCAGACT |
| Primers used for RT-PCR of *Act2* mRNA (Zhang *et al*, 2002) |
| Act2 FWAct2 RV | GTTGGTGATGAAGCACAATCCAAGCTGGAACAAGACTTCTGGGCATCT |
| Primers used for qPCR of18S rRNA (Zoschke *et al*, 2007) |
| 25 5’ At18S26 3’ At18S | AAACGGCTACCACATCCAAGACTCGAAAGAGCCCGGTATT |
| Primers used for qPCR of *bZIP60s* mRNA (Mishiba *et al*, 2013) |
| bZIP60s-F-rtbZIP60s-R-rt | AAGCAGGAGTCTGCTGTTGGTTTGTGTGGGACATATAAGGGAAT |
| Primers used for qPCR of *PR-4* mRNA (Mishiba *et al*, 2013) |
| PR-4-F-rtPR-4-R-rt | GTGGGATGCTGATAAGCCGTATGCAGCATTTGTTCTTGTGTTCT |
|  |  |
| **Table S1.** (Continued) |
| Name | Sequence |
| Primers used for qPCR of *PRX34* mRNA (Mishiba *et al*, 2013) |
| PRX34-F-rtPRX34-F-rt | ATGCGCAGATATGCTCACCAAATGGAGCTGGAAGATTTGC |
| Primers used for qPCR of *MBL1* (AT1G78850) mRNA (Mishiba *et al*, 2013) |
| AT1G78850-F-rtAT1G78850-R-rt | CTTTGATTCTCCCACCGACACTTGGCTTCCATCACGAGAC |
| Primers used for qPCR of *PME41* (AT4G02330) mRNA |
| PME41-F-rtPME41-F-rt | GATGATTGGTGACGGAATAAACCCGGTATTTCGGAAAGTCATGTTC |
| Primers used for qPCR of *cFBPase* (AT1G43670) mRNA |
| cFBPase-F-rtcFBPase-R-rt | ACGTTGGACCACACTGATGATTCCAGTGCTCAACACAAGC |
| Primers used for qPCR of *UGP1* (A3G03250) mRNA |
| UGP1-F-rtUGP1-R-rt | GTGAGAGTGAGAAGAGCGGATTTTCTCGTAGGGAACAACGATTT |
| Primers used for *IRE1A* gene amplification |
| IRE1A FWIRE1A RV | CACCGTCTAGGACGCCTAGGCACCAGAAACGATGGATGTTTTCCCG |
| Primers used for *IRE1B* gene amplification |
| IRE1B FWIRE1B RV | CACCGTTGATACTCACGGAAGTCGGGGGTACGGGTCTTTCAGATTG |
| Primers used for triple FLAG tag introduction into *IRE1A* gene |
| IRE1A FLAG FWIRE1A FLAG RV | GCCGACGATGTGACGTATCCGGACTACAAAGACCATGACGGTGATTATAAAGATCATGACATCGATTACAAGGATGACGATGACAAGATCGTTCCATCTAGTCCCGGCCGGCCGGGACTAGATGGAACGATCTTGTCATCGTCATCCTTGTAATCGATGTCATGATCTTTATAATCACCGTCATGGTCTTTGTAGTCCGGATACGTCACATCGTCGGC |
| Primers used for triple FLAG tag introduction into *IRE1B* gene |
| IRE1B FLAG FWIREB FLAG RV | AAAGGATCTGAAATCTCCAAGGACTACAAAGACCATGACGGTGATTATAAAGATCATGACATCGATTACAAGGATGACGATGACAAGTTCTATGACAAATCTATCTCCGGAGATAGATTTGTCATAGAACTTGTCATCGTCATCCTTGTAATCGATGTCATGATCTTTATAATCACCGTCATGGTCTTTGTAGTCCTTGGAGATTTCAGATCCTTT |
| Oligonucleotides used for gRNA constructs (underlines are the target sequences for *IRE1B* gene) |
| gRNA1 linker FWgRNA1 linker RVgRNA2 linker FWgRNA2 linker RV | GATTGATGGAAGCACGAAACAGGCAAACGCCTGTTTCGTGCTTCCATCGATTGTCGGATTGAGAGATTTGATAAACATCAAATCTCTCAATCCGAC |
| **Table S1.** (Continued) |
| Name | Sequence |
| Primers used for *IRE1C* promoter amplification |
| IRE1Cpro-FWIRE1Cpro-RV | CACCGCAAAAAGCCAAAACATTTGAAGCTTGGTCTCTTGAAGAATACAAAG |
|  |  |

**References**

Deng Y, Humbert S, Liu JX, Srivastava R, Rothstein SJ, Howell SH (2011) Heat induces the splicing by IRE1 of a mRNA encoding a transcription factor involved in the unfolded protein response in Arabidopsis. *Proc Natl Acad Sci USA* 108: 7247–7252

Mishiba KI, Nagashima Y, Suzuki E, Hayashi N, Ogata Y, Shimada Y, Koizumi N (2013) Defects in IRE1 enhance cell death and fail to degrade mRNAs encoding secretory pathway proteins in the *Arabidopsis* unfolded protein response. *Proc Natl Acad Sci USA* 110: 5713−5718

Zhang B, Ramonell K, Somerville S, Stacey G (2002) Characterization of early, chitin-induced gene expression in *Arabidopsis*. *Mol Plant Microbe In* 15: 963–970

Zoschke R, Liere K, Börner T (2007) From seedling to mature plant: Arabidopsis plastidial genome copy number, RNA accumulation and transcription are differentially regulated during leaf development. *Plant J* 50: 710–722