**Table S1.** Information related to CDDPs targets and primer sequences

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Gene** | **Gene fonction** | **Primers** | GC (%) | Sequences (5’3’) | Annealing  temperature |
| WRKY | Transcription factor for developmental and  physiological roles | WRKY R2 | 15 | GCCCTCGTASGTSGT | 52°C |
| WRKY R3 | 15 | GCASGTGTGCTCGCC | 53°C |
| WRKY R2B | 15 | GCCCTCGTASGTSGT | 53°C |
| WRKY R3B | 15 | CCGCTCGTGTGSACG | 53°C |
| MYB | Unknown (implicated in secondary metabolism,  abiotic and biotic stresses, cellular morphogenesis) | MYB1 | 15 | GGCAAGGGCTGCCGC | 54°C |
| MYB2 | 15 | GGCAAGGGCTGCCGG | 55°C |
| ERF | Transcription factor involved in plant disease  resistance pathway | ERF1 | 17 | CACTACCGCGGSCTSCG | 56°C |
| ERF2 | 17 | GCSGAGATCCGSGACCC | 57°C |
| ERF3 | 17 | TGGCTSGGCACSTTCGA | 57°C |

**Table S2.** Primers used in qRT-PCR analysis

|  |  |  |
| --- | --- | --- |
| Gene ID | Primers | References |
| *HsfA2* | F : ACCTTGTGGATCAGCTTGGTTTCC  R : AATAGTGGAGGAGGCCAGAGGAAC | (Anfoka et al., 2016) |
| *HsfB1* | F : GGTGCAGGCGAAGAAACAATGC  R : TCATATCGGGTGCAACCTTCACG | (Moshe et al., 2016) |
| *Hsp17* | F : ACTTGGCATCGTGTGGAACG  R : TGATCCATCTTT GCGTTCTCTGG |
| *Hsp90* | F : TGCGTTCTTGTATGGAAGTCTGC  R : TGGACCACTTAGTCACGACCAATC |
| *APX1* | F : ACGATGATATTGTGACACTCTTCCA  R : AAGCGATGAAACCACAAAAACA | (Neily et al., 2011) |
| *APX2* | F : TGGGAGGGTGGTGACATATTTT  R : TTGAAGTGCATAACTTCCCATCTTT |
| *Hsp101* | F : GTGGCAAGTGTACCATGGAGA  R : GACTTGCCTCAACTGCTCGT | (Fragkostefanakis et al., 2018) |
| *HsfA1a* | F : GGGATAAATGAGGCAGCAAA  R : TTGACCTGCAATTGCTGAAG |
| *Actin* | F: GGGATGGAGAAGTTTGGTGGTGG  R: CTTCGACCAAGGGATGGTGTAGC | (Løvdal and Lillo, 2009) |

**Table S3.** Primers used for qRT-PCR of miRNAs target genes

|  |  |  |
| --- | --- | --- |
| Gène ID | Nucleotide sequence5’-3’ | |
| *SPL2* | F : CAAGGGCACCACAGCCGAG | R :CACTCTCAGGCTCGGATGAAC |
| *SIGRAS24* | F : GCTGCAGAGCTGGTCCAGACAG | R :GAGTAGCAATTGTAAAGCTTCCT |
| *Laccase7* | F :CCCTTGCTCCGTTAATCAAACATAC | R :CTACGTCCGTGACGTAGGGATC |

**Table S4.** Primers used in qRT-PCR for miRNAs expression under HS

|  |  |  |
| --- | --- | --- |
| Gene ID | Nucleotide sequence 5’-3’ | |
| *miR397* | F:AGTGCAGCGTTGATGACATA | R:CGAGTTTAGCGTTGATGAAAAATGA |
| *miR156d* | F:TGACAGAAGAGAGTGAGCAC | R :GCTCACTCTCTTCTGTGAGG |
| *miR171d* | F :AAGGACGAGTTGAGCCGC | R :GTATTCTGTGCTGGGTGG |

**Figure S1.** Phenotype of Tomatoes genotypes under HS

