**Comparative transcriptome analysis between cold-tolerant and sensitive *Brassica oleracea* L. in response to low temperature stress**

**Shuhan Jiang; Dongjian Xia; Qian Dai; Yuxia Luo; Yao Chen; Jianghua Song**\*

College of Horticulture, Vegetable Genetics and Breeding Laboratory, Anhui Agricultural University, 130 West Changjiang Road, 230036 Hefei, Anhui, China;

\*Corresponding author: Jianghua Song

Tel/Fax: +86 551 65786212/+86 551 65786185.

E-mail: jhsong@ahau.edu.cn

**Table S1** The number of genes detected in all samples before and after ZG and YN treatment

|  |  |  |
| --- | --- | --- |
| **All Reference Genes** | **Known Gene Num** | **New Gene Num** |
| 44382 | 33118（74.62%） | 3053 |

**Table S2** Comparison of up-regulated and down-regulated genes between ZG and YN groups before and after treatment

|  |  |  |
| --- | --- | --- |
| **Group comparison** | **Significantly up-regulated differential genes** | **Significantly down-regulated differential genes** |
| YC-vs-YT | 4253 | 5938 |
| ZC-vs-YC | 2280 | 2354 |
| ZC-vs-ZT | 3902 | 5309 |
| ZT-vs-YT | 2439 | 2819 |

**Table S3** The primer sequences used for PCR

|  |  |  |
| --- | --- | --- |
| **Gene id** | **Symbol** | **Primers for Quantitative RT-PCR** |
| FORWARD PRIMER | REVERSE PRIMER |
| GAPDH | ACTIN | GCTAACTGCCTTGCTCCACTT | CGGCTCTTCCACCTCTCCAGT |
| XM\_013779081.1 | ERF15 | AAGAAGAAACCCCAAACGCC | TTTGTTGCAAAAGCCGCTTG |
| XM\_013755783.1 | ARF7 | GTTACGCGACCAAGTCCATC | CGGAGAACTGAGCGAACATG |
| XM\_013736382.1 | BZR1 | TCTTCACCCTCACACCCATC | GGCTCTTCTCCGTCTCTCTC |
| XM\_013759158.1 | SKP2A | CAAAGCGGGGTGAAGAACAA | ACGTCAAGTTCAAACACCCG |
| XM\_013745820.1 | VTC2 | GAAGGTGGGAAGCAAGTTGG | TGGTGGTCATGCTAGTGGAA |
| XM\_013774520.1 | OMR1 | GCTACGGATTGTGACGGAAC | TCCTTTTCCGAGCCACATCT |
| XM\_013774278.1 | FBA2 | TCTATCCTCTCGCACTGCTG | CAATGTCGTGTTCTCCGTCC |
| XM\_013751123.1  | ABF3 | GCTCGTAATGGGTTTGGTCC | TGGAGGTTGAGAACGGTTGA |
| XM\_013751129.1 | BHLH28 | ACGAAAAGGGAAAAGGCGTC | ACTCCCGTTTCTCCTTCCTG |
| XM\_013730066.1 | LHCB4.2 | GGTTTCCGACATCAACTCCG | ACTCGGCCGGTTTACCTAAA |
| XM\_013757787.1 | CAB36 | CAAGAACCGTGAGCTCGAAG | TTGCGCGTGGATCAAGTTAG |
| XM\_013736595.1 | CBF5 | GCGTGGTGGCTAAGATCAAG | ACTCAACAGGCGTCTTCTCA |
| XM\_013730683.1 | EMB1687 | GCCGATTGTGTTTCTCCTCC | AAGGATCCGAGACAAGAGGC |