

**HD2C interacts with HDA6 and is involved in ABA and salt stress response in *Arabidopsis***

*Ming Luo, Yu-Yuan Wang, Xuncheng Liu, Songguang Yang, Qing Lu,  
Yuhai Cui, and Keqiang Wu*

**Supplementary Material**

## Supplementary Tables:

**Table S1.** Primers used for RT-PCR analysis

Genes	Primers
<i>HD2A</i>	5' – AATTGAGCTCTAGCTCTGGTTGCAGCCTTC – 3' and 5' – GCTCTAGACATGGGCTATTCTGAGGAAGAAAGAG – 3'
<i>HD2B</i>	5' – CAGCTTCTACTCCTCAGAAG – 3' and 5' – AATTAGATCTCTACCCTTCCCTGCC – 3'
<i>HD2C</i>	5' – TGACGCTGACGGTAGTGAAG – 3' and 5' – AATTAGATCTGCACTGTGTTGGCCTTG – 3'
<i>HD2D</i>	5' – TGATCTCTACTTAGGGCACG – 3' and 5' – AATTGAGCTCCTACTTTGCAAGAGGGAC – 3'
<i>ABI1</i>	5' – GCCATGTCGAGATCCATTGG – 3' and 5' – AACGATGCATCCCCAGCCAC – 3'
<i>ABI2</i>	5' – CAAGATCCATTGGCGATAGATAACC – 3' and 5' – CCTCTTTCTCCGCCGGAAAG – 3'
<i>AtERF4</i>	5' – CGGCTACTACTAACCAAGACCC – 3' and 5' – TCGCTGAAGGCACAACCAA – 3'
<i>MYB2</i>	5' – AGCCGGGTTTCGTTCAATTG – 3' and 5' – CGAATACGATGTCGTATCGG – 3'
<i>MYC2</i>	5' – CTAAACCAAAGATTCTACGCG – 3' and 5' – GGTTCTTGATTGGAGTTCTC – 3'
<i>UBQ</i>	5' – GATCTTGCCGGAAAACAATTGGAGGATGGT – 3' and 5' – CGACTTGTCAATTAGAAAGAAAGAGATAACAGG – 3'

**Table S2.** Primers used for Chip assay

Genes	Primers
<i>Actin2/7</i>	5' – CGTTTCGCTTCCTTAGTGTAGCT – 3' and 5' – AGCGAACGGATCTAGAGACTCACCTG – 3'
<i>Ta3</i>	5' – GATTCTTACTGTAAAGAACATGGCATTGAGAGA – 3' and 5' – TCCAAATTCTGAGGTGCTGTAAACC – 3'
<i>ABII P</i>	5' – GATATTTACCGGTGGTC – 3' and 5' – GACGTGTCGTAGTCCGAGTT – 3'
<i>ABII E</i>	5' – CTTGTCTTCCTAGCTTCTTC – 3' and 5' – CCTTTACCCAATCTGATCCC – 3'
<i>ABI2 P</i>	5' – CTAGTGTGGTCAGTGTAGATG – 3' and 5' – GTGTAACATGCCATATGTCAC – 3'
<i>ABI2 E</i>	5' – CTCTCCTTCTCTTCCAAC – 3' and 5' – GAGGGTCAGTGAATGGTCTG – 3'
<i>AtERF4 P</i>	5' – GTGTACTCACTAGAGCAAGC – 3' and 5' – CCGTACAGTATTGACGC – 3'
<i>AtERF4 E</i>	5' – ACCATTCAGGCTTGAC – 3' and 5' – AACGCCTCTGTAACGAA – 3'

## Legends of supplementary figures

### **Figure S1.** Negative controls in BiFC assays

As negative controls, HD2C and HDA6 fused with YN or YC and the empty vector (YN and YC) were co-transfected into protoplasts and visualized using confocal microscope as negative controls. No YFP signals were detected.

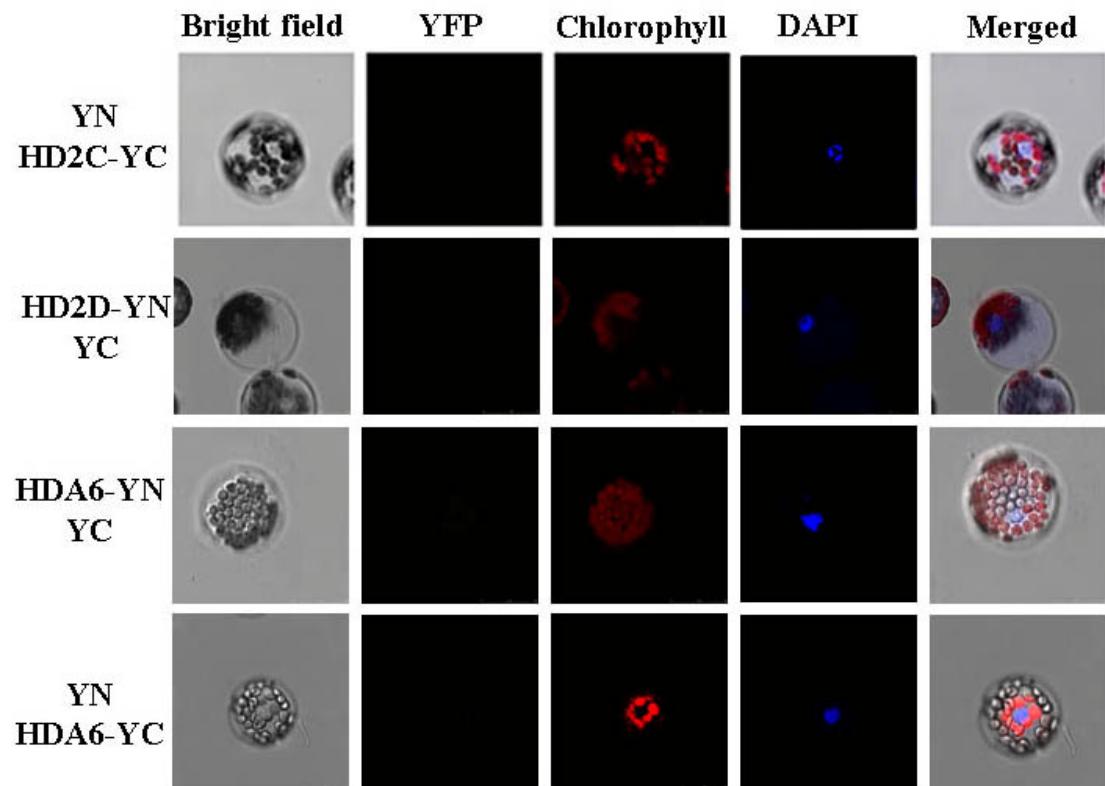
### **Figure S2.** Expression of *MYB2* and *MYC2* determined by real-time RT-PCR.

Total RNA was isolated from leaf tissues. Asterisks mark values that are significantly different from the wild type (t- test, \*\*P <0.01, \*P<0.05). The experiment was repeated three times with similar results.

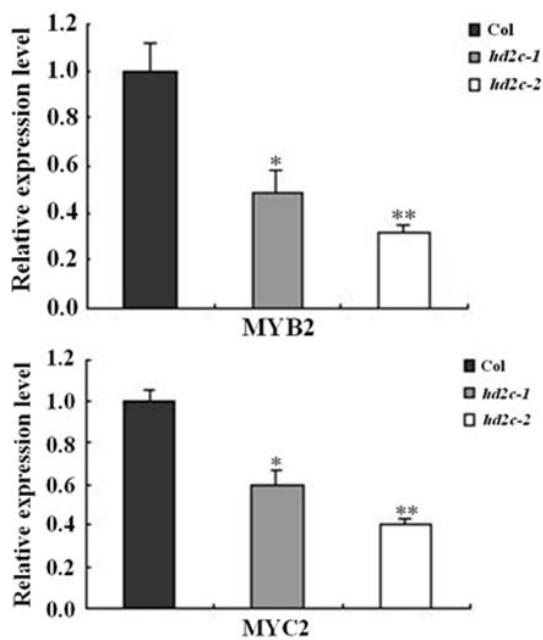
**Figure S3.** Two additional independent analyses of histone acetylation and methylation of *ABI1* and *ABI2* in *hda6* plants. Relative levels of H3K9K14Ac (A) and H3K9Me2 (B) in *ABI1* and *ABI2* promoter and first exon regions were determined. The amounts of DNA after ChIP were quantified and normalized to an internal control *ACTIN2* for H3K9K14Ac or *Ta3* for H3K9Me2. Error bars represent standard errors. Asterisks mark values that are significantly different from the wild type (t- test, \*P<0.05).

**Supplementary Figures:**

**Figure S1**



**Figure S2**



**Figure S3**

