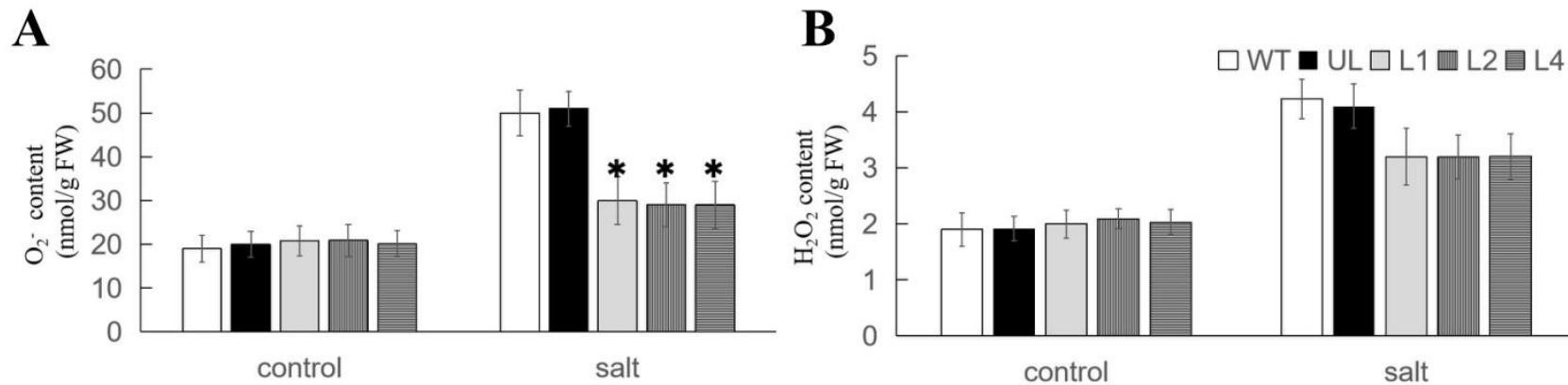


**Table S1.** List of primers used in this study.

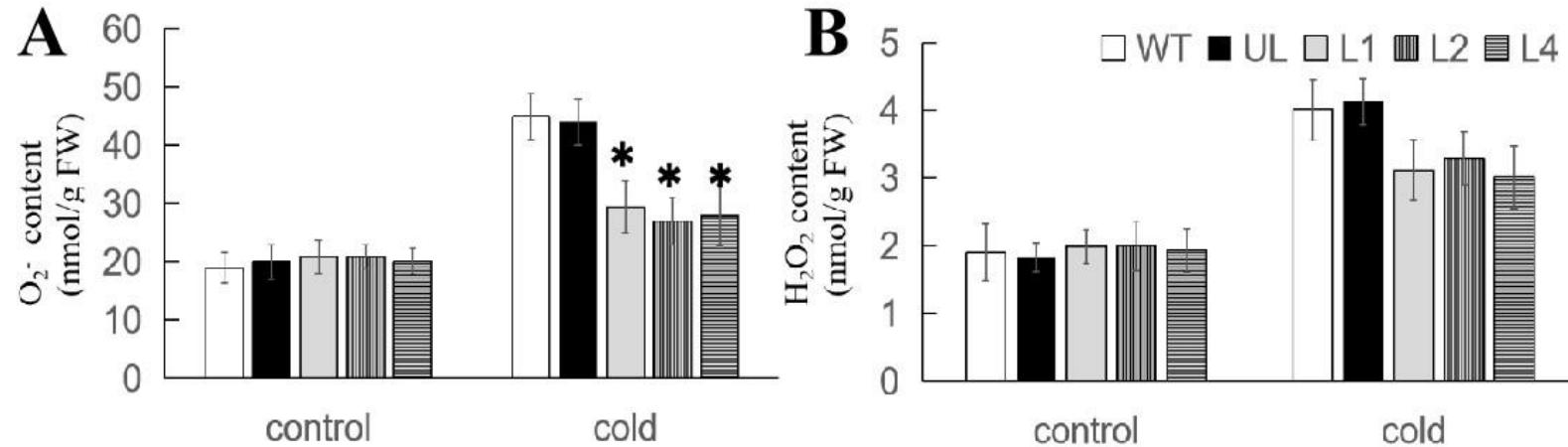
Primer Name	Primer Sequence (5'→3')	Purpose
<i>AtSOS1</i> -F	CTGCTTGCTACATTCCTGC	qPCR
<i>AtSOS1</i> -R	TGCTTCCTCTCCTTCCTT	qPCR
<i>AtSOS3</i> -F	GAATCCATCGCTCATCAA	qPCR
<i>AtSOS3</i> -R	CCATTCTCCTCTTCACA	qPCR
<i>AtNHX1</i> -F	AGCCTTCAGGGAACCAAAAT	qPCR
<i>AtNHX1</i> -R	CTCCAAAGACGGTCGCATG	qPCR
<i>AtLEA3</i> -F	GATTGACCCGGCTGAGCTACGA	qPCR
<i>AtLEA3</i> -R	AGATGGGATTCAACCACAAAAGA	qPCR
<i>AtCCA1</i> -F	TTTGAGGCTTATGGTAG	qPCR
<i>AtCCA1</i> -R	TTTCTGAGCGTGACTTCT	qPCR
<i>AtCOR4</i> -F	GAATCACCAAGCGACGACA	qPCR
<i>AtCOR4</i> -R	CCCCAAGAAATCAAACAA	qPCR
<i>AtCBF1</i> -F	CCGACTTGTGGATAATATGGCTGAAG	qPCR
<i>AtCBF1</i> -R	TTAGTAACTCCAAAGCGACACGTCA	qPCR
<i>AtCBF3</i> -F	TTTACACGGCGGAACAGA	qPCR
<i>AtCBF3</i> -R	CACTGTACGGACGGAAGC	qPCR
<i>FvActin</i> -F	GCGACAATGGAACACTGGAATGG	qPCR
<i>FvActin</i> -R	GACAATTCCCAGTCAGCAGTG	qPCR
<i>FvMYB114</i> -F	<b>ATGGAGGAGCAGACGGGT</b>	full-length cDNA of <i>FvMYB114</i>
<i>FvMYB114</i> -R	<b>CTATTCCGTATTATGCAAGATTGTG</b>	full-length cDNA of <i>FvMYB114</i>
<i>HR</i> -F	AGAACACGGGGACGAGCTC <b>ATGGAGGAGCAGACGGGT</b>	PCR for homologous recombination
<i>HR</i> -R	ACCATGGTGTGACTCTAGA <b>CTATTCCGTATTATGCAAGATTGTG</b>	PCR for homologous recombination
<i>FvMYB114</i> -qF	GGAGGAGCAGACGGGTTT	qPCR
<i>FvMYB114</i> -qR	TTGCCTAAGAGTTGTGA	qPCR
<i>FvMYB114</i> -slF	GTCGAC <b>ATGGAGGAGCAGACGGGT</b>	For subcellular localization
<i>FvMYB114</i> -slR	<b>TTCCGTATTATGCAAGATTGTG</b> GGATCC	For subcellular localization

ATGGAGGAGCAGACGGTTTGAGAAAGGCCATGGACGGAGAAGATAATATTG  
 M E E Q T G L R K G A W T R E E D N I L  
  
 AGGCAGTGCCTCGCAAAGCATGGAGAAGGAAAATGGCACCAAGATTCTGCAGCTGCAGGC  
 R Q C V A K H G E G K W H Q I P A A A G  
  
 TTGAAAAGATGCAGGAAGAGCTGTAGGCTAAGGTGGCTGAATTATCTGAAACCGGATATA  
 L K R C R K S C R L R W L N Y L K P D I  
  
 AAGAGAGGAGACTTGAGGATGCTGAAGTAGATCTCATCATTAGGCTTCACAAACTCTTA  
 K R G D F E D A E V D L I I R L H K L L  
  
 GGCAACAGGCAAGCAGAAACTTATACATATACGCACAAATCTGCATAATACGGAATAG  
 G N R Q A E T L Y I Y A Q I L H N T E \*  
 300bp

**Figure S1.** Sequence of *FvMYB114*. The whole length of *FvMYB114* is 300bp, encoding 99aa. Underline means conserved DNA-binding domain of *FvMYB114*. \* means termination codon.



**Figure S2.**  $O_2^-$  content and  $H_2O_2$  content were tested between WT , UL and transgenic *Arabidopsis* under salt treatment. (A)  $O_2^-$  content of WT, UL, L1, L2 and L4 under control and salt condition; (B)  $H_2O_2$  content of WT, UL, L1, L2 and L4 under control and salt condition. \*  $P \leq 0.05$



**Figure S3.**  $\text{O}_2^-$  content and  $\text{H}_2\text{O}_2$  content were tested between WT, UL and transgenic *Arabidopsis* under cold treatment. **(A)**  $\text{O}_2^-$  content of WT, UL, L1, L2 and L4 under control and cold condition; **(B)**  $\text{H}_2\text{O}_2$  content of WT, UL, L1, L2 and L4 under control and cold condition. \*  $P \leq 0.05$ .