

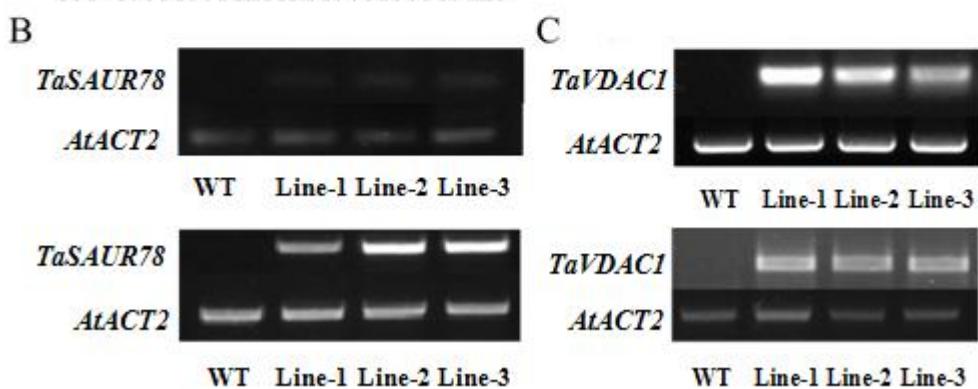
Appendix A Changes in the expression of candidate SAURs in the transcriptome analysis of wheat roots. Numbers in table are \log_2 of gene expression in Jimai 19 root under salt stress than that before salt stress.

Gene ID	Time after salt stress treatment					Annotation
	2 h	6 h	24 h	48 h	72 h	
Treas_5DL_32B83E57E	-3.11	-4.32	-5.53	-5.60	-	<i>SAUR</i>
Treas_5DL_677150034	-2.88	-3.70	-3.69	-5.76	-	<i>SAUR</i>
Treas_5BL_80B9C8E10			-4.62	-5.10	-	<i>SAUR</i>
Treas_4AL_0682CD14B			3.91	3.62	-	<i>SAUR</i>
Treas_7DL_17EE618FC				3.65	-	<i>SAUR</i>
Treas_7DL_E71974C9D				3.98	-	<i>SAUR</i>
Treas_1AL_13807565F	1.04					<i>SAUR</i>

Appendix B Primers used in this study

Primer name	Primer sequences	
	Forward	Rewards
<i>TaSAUR78-cds</i>	GTGCATCCTTCAAAGATTCAACGA	TCCCCAACACAAGGGTC
<i>TaVDAC1-cds</i>	GCCGATCCCAGCTCACCG	ATCCGAAACCGAGGAACACCC
<i>TaSAUR78-GFPGUS</i>	GCTCTAGAATGGCTGAGAAGGGTC	GCTCTAGACTCGACC GGCAATGAT
<i>TaVDAC1-GFPGUS</i>	GCTCTAGAATGGCGGCCAGGCCTC	GCTCTAGATCAAGGCTTGAGAGCAAT
<i>TaSAUR78-Y</i>	CATATGCCATGGAGGCCGATGGCATGGCTGAGAAG	TATGCTAGTTATGCCGCCCTACGACCGGCAAT
<i>TaVDAC1-Y</i>	GGAATTCATGGCGGCCAGGCCTC	CGGGATCCTCAAGGCTTGAGAGCAAT
<i>VDAC-bifc</i>	GCTCTAGAATGGCGGCCAGGCCTC	GGGGTACCAAGGCTTGAGAGCAAT
<i>TaSAUR78-bifc</i>	GGGGTACCATGGCTGAGAAGGGTC	GCTCTAGACTCGACC GGCAATGAT
<i>AtAct2</i>	TTCGTTTGCCTTTAGTCCC	GGGAACAAAAGGAATAAAGAGGC
<i>TaSAUR78</i>	GGTCGTGGTGC GGATGGAGTGCTT	CCGACATCTGCTTCTC CCTCTCG
<i>TaVDAC1</i>	TCACCGCGGCCATGGCGG	CCCGAATGCATCCGAAACCGAGG
<i>TaTubulin</i>	GAGGCCTCGTGTGGTCGCTTGT	GCCCAGTTGTTACCCGACCAGA
<i>AtDREB</i>	CATCAGAGCCAAGACCAAAACC	TGTAGGACCATTGCCTCAGAAC
<i>AtRD26</i>	AATGGGT CGTCATCGTCT	GCATCGTAACCACCGTAA
<i>AtGOLS1</i>	GACGAGTCTCTGATTACAAGAATGTT	AAACTGCTGAAGTGTCTGTTGC
<i>AtHSP70</i>	CTGACAGCGAGCGTCTCAT	GGATCACTGTATCTTCTCCGATT

1 M A E K G S A A R K A G L I T K T L D R
 1 ATGGCTGAGAAGGGTGGCAGCAAGGAAGGCCGGCTGATCACCAAGACGCTGGACCGG
 21 C R S T T A R N N K P A E G C F S V Y V
 61 TGCCGGAGCAOGACGGOGAGGAACAACAAGOCGGCAGAGGGCTGCTTCAGTGTAOGTC
 41 G A G R Q R F V V R M E C L N H P L F R
 121 GG TGCGGGCAGGCAGCGGTTGGTGGCGGATGGAGTGCTTAAACACOCGGCTGTTGGG
 61 A L L E E A E E A F G Y A D S G P L E L
 181 GCACTGCTTGAGGAGGOCGAGGAGGCGTTGGGTATGCOGACTCGGGGOCCTTGAGCTG
 81 P C N T E A F T K V L E K I E E E K Q M
 241 CCCTGCAACAOCGAGGCATTACCAAGGTGCTGGAGAAGATCGAGGAGGAGAAGCAGATG
 101 S A G R R H G L A R G N S Y R L L S T G
 301 TCGGCTGGAGGAGGCATGGCTCGOCAGGGGGAACTCCTACOGGCTGCTCAGCACOGGC
 121 R P V I I G R S *
 361 OGGCCTGTCATCATGGCOGGTOGTAG

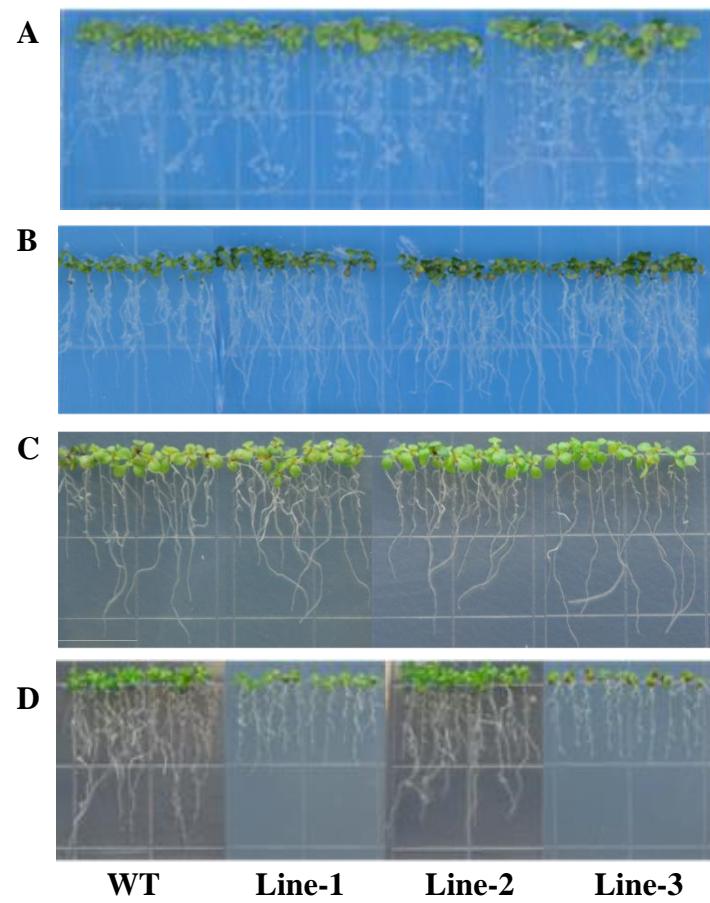


Appendix C *TaSAUR78* Cloning and confirmation transfaction in *Arabidopsis*

A. cds and peptide sequence of *TaSAUR78*; B. Genomic DNA PCR (lower panel) and RT-PCR (upper panel) confirmation of *TaSAUR78* transfection in *Arabidopsis*; C. Genomic DNA PCR (lower panel) and RT-PCR (upper panel) confirmation of *TaVDAC1* transfection in *Arabidopsis*.

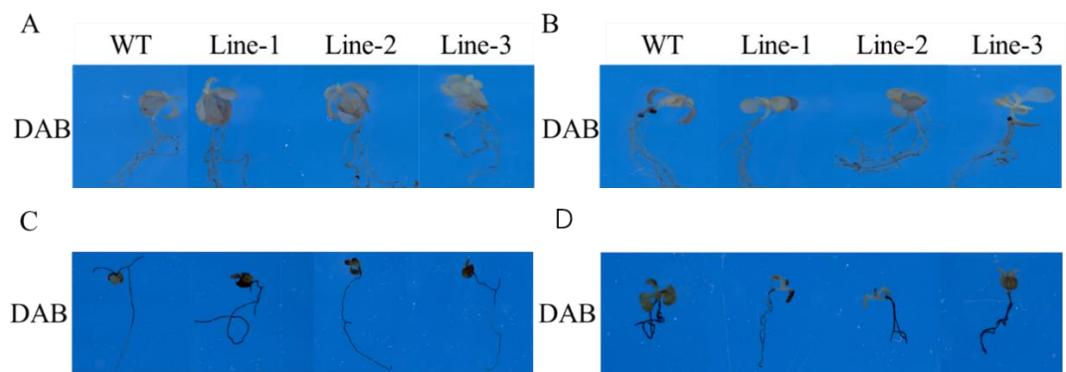
Appendix D Y2H screening results

Candidates	Reads
<i>Triticum aestivum</i> C2 domain-containing protein	8
<i>Triticum aestivum</i> SGT1 mRNA	7
<i>Triticum aestivum</i> TaSAG6 mRNA for seed imbibition protein	2
<i>Triticum aestivum</i> VDAC 1 mRNA	1
<i>Triticum aestivum</i> cultivar Iris (H9) S-adenosyl methionine decarboxylase mRNA, complete cds	1
<i>Triticum aestivum</i> polyubiquitin (WubiG) mRNA, partial cds	1



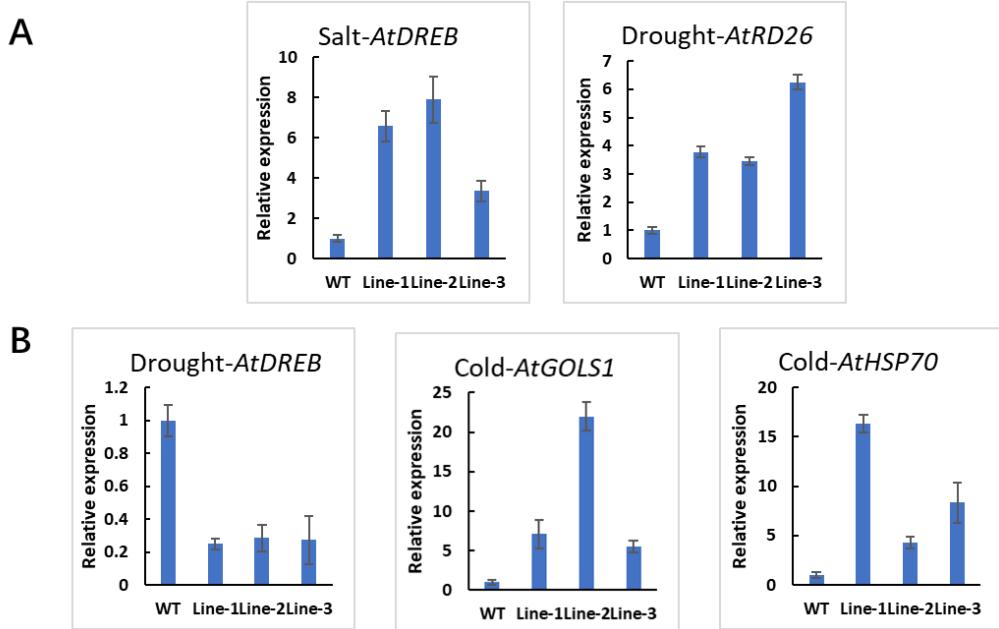
Appendix E Root length of overexpression lines and wild-type plants

TaSaur78 Overexpression lines and wild-type plants grown erectly on MS media with 100mM NaCl (A) and 300mM mannitol (B). *TavDac1* Overexpression lines and wild-type plants grown erectly on MS media with 100mM NaCl (C) and 300mM mannitol (D).



Appendix F ROS accumulation in WT and overexpression lines under stress treatment

The Wild type (WT) and overexpression lines (Line-1, 2, 3) were stained with DAB. A-B. ROS accumulation in WT and 35S:*TaSaur78* overexpression lines under salt (A) and drought stress (B). C-D: ROS accumulation in WT and 35S:*TaVdac1* overexpression lines under salt (C) and drought stress (D).



Appendix G The relative transcript levels of stress responsive genes in 35S:*TaS*AUR78 (A) and 35S:*TaV*DAC1 (B) lines under abiotic stress.

Salt-*AtDREB*, Drought-*AtRD26*, Drought-*AtDREB*, Cold-*AtGOLS1* and Cold-*AtHSP70* indicate respectively that the relative expression level of genes *AtDREB*, *AtRD26*, *AtDREB*, *AtGOLS1* and *AtHSP70* in wild type (WT) and 3 overexpression lines (line-1, 2, 3) under the salt, drought, drought, cold and cold stresses.