

SUPPLEMENTARY MATERIAL

Table S1. List of primers used in *VuWRKY21* and 87 gene expression analysis in *Arabidopsis* transgenic lines and WT by qPCR.

Primer	Sequence (5' – 3')	Reference
<i>AtP5CS1</i> (AT2G398000)	(F) AGGGAAAGTTCCAGAAAG (R) CATAACTAAGCGAGCCAC	Zhu et al. (2018)
<i>AtNXH1</i> (AT5G27150.1)	(F) GACTCCTTCATGCGACCCG (R) CACGTTACCCTCAAGCCTTAC	Bao et al. (2018)
<i>AtRD29A</i> (AT5g52310)	(F) CAAAGCAATGAGCATGAGCAAG (R) CGGAAGACACGACAGGAAACAC	Ullah et al. (2018)
<i>AtSOS1</i> (AT2G01980.1)	(F) TCGGCAGCATGGTTAATGTG (R) TTGGCTGAAACGAGACCTTGA	Bao et al. (2018)
<i>AtSOS2</i> (AT5G35410.1)	(F) TTTGGTCTTGCGGGGTTATTC (R) CGTGT TTTGGGATTGGGGTC	Ullah et al. (2018)
<i>AtSOS3</i> (AT5G24270.1)	(F) AATCCATCGCTCATCAAGAACA (R) CGGTTTATTTCCAAATCCTAGCTTC	Bao et al. (2018)
<i>AtUbiquitin</i> (AT1G02860)	(F) CTGCGACTCAGGGAATCTTCTAA (R) TTGTGCCATTGAATTGAACCC	Ullah et al. (2018)
<i>VuWRKY21</i>	(F) TGTCGGTGGTGTGTGAGAAC (R) CGGACTGGTTTCTTTTCGCC	Silva-Matos, et al. (2022)
<i>VuWRKY87</i>	(F) CCACTTCCTGCCGCTGAAT (R) ACTTCGGGGACTACTGCTGA	Silva-Matos et al. (2022)

Table S2. Blastn results in the genome of *Arabidopsis thaliana* using primer sequences of *VuWRKY* used in qPCR, performed after the salinity experiment with WT and transgenic lines of *A. thaliana*.

Gene	Result	Access link
<i>VuWRKY21</i>	AT1G75810	https://www.ncbi.nlm.nih.gov/tools/primer-blast/primertool.cgi?ctg_time=1648657455&job_key=5uw5B6ISr7qIgD-FMuUbt0j-CoVI7RGYZA
<i>VuWRKY87</i>	-	https://www.ncbi.nlm.nih.gov/tools/primer-blast/primertool.cgi?ctg_time=1648661036&job_key=vbdiXb3HsG-XUbVUuDSRZsIvgFTvPJtJ7g

Table S3. Expression values (FC and related data) of *VuWRKY21* gene expression analysis in *Arabidopsis* transgenic lines and WT, by qPCR. The values from the REST analysis are related to four times after stress imposition (1, 2, 4 and 8 h) compared to control. Abbreviations: REF = Reference gene; TRG = Target.

	Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
WT	<i>VuWRKY21</i>	TRG 1 h	1	0.001	0.000 - 4.944	0.000 - 15.671	0.077	
WT	SOS1	TRG 1 h	1	1.724	0.388 - 9.280	0.139 - 26.909	0.301	
WT	SOS2	TRG 1 h	1	1.222	0.715 - 1.963	0.454 - 3.204	0.278	
WT	SOS3	TRG 1 h	1	1.422	0.503 - 4.298	0.232 - 11.314	0.364	
WT	RD29A	TRG 1 h	0.98	1.754	0.194 - 17.928	0.050 - 63.870	0.435	
WT	<i>AtNHX1</i>	TRG 1 h	1	1.410	0.431 - 6.239	0.173 - 7.945	0.4	
WT	<i>AtP5CS1</i>	TRG 1 h	0.96	0.001	0.000 - 5.761	0.000 - 30.941	0.079	
L1	<i>VuWRKY21</i>	TRG 1 h	1	4.849	2.359 - 10.047	1.693 - 19.698	0	UP
L1	SOS1	TRG 1 h	1	1.397	0.931 - 2.158	0.683 - 3.387	0.03	UP
L1	SOS2	TRG 1 h	1	0				
L1	SOS3	TRG 1 h	1	0				
L1	RD29A	TRG 1 h	0.98	6.775	3.081 - 15.780	1.015 - 24.071	0	UP
L1	<i>AtNHX1</i>	TRG 1 h	1	1.408	1.015 - 1.794	0.818 - 2.219	0.003	UP
L1	<i>AtP5CS1</i>	TRG 1 h	0.96	8.008	3.980 - 16.196	2.371 - 32.028	0	UP
L2	<i>VuWRKY21</i>	TRG 1 h	1	0.444	0.126 - 1.434	0.071 - 3.095	0.052	
L2	SOS1	TRG 1 h	1	0.759	0.171 - 2.028	0.093 - 3.605	0.489	
L2	SOS2	TRG 1 h	1	0.623	0.279 - 1.671	0.033 - 2.809	0.244	
L2	SOS3	TRG 1 h	1	0.295	0.150 - 0.608	0.090 - 0.993	0	DOWN
L2	RD29A	TRG 1 h	0.98	6.600	1.789 - 33.520	0.592 - 61.103	0.002	UP
L2	<i>AtNHX1</i>	TRG 1 h	1	1.394	0.501 - 3.602	0.191 - 6.320	0.331	
L2	<i>AtP5CS1</i>	TRG 1 h	0.96	2.653	0.606 - 12.364	0.128 - 29.557	0.09	
L3	<i>VuWRKY21</i>	TRG 1 h	1	4.514	0.414 - 71.306	0.176 - 442.643	0.166	
L3	SOS1	TRG 1 h	1	0.78	0.257 - 2.259	0.093 - 6.453	0.51	
L3	SOS2	TRG 1 h	1	0				
L3	SOS3	TRG 1 h	1	0.424	0.258 - 0.715	0.206 - 1.035	0	DOWN
L3	RD29A	TRG 1 h	0.98	0.153	0.011 - 1.093	0.004 - 2.858	0.01	DOWN
L3	<i>AtNHX1</i>	TRG 1 h	1	0.38	0.047 - 1.881	0.021 - 2.949	0.131	
L3	<i>AtP5CS1</i>	TRG 1 h	0.96	1.244	0.287 - 5.899	0.076 - 10.832	0.653	
WT	<i>VuWRKY21</i>	TRG 2 h	1	2.890	1.091 - 7.493	0.629 - 16.000	0.003	UP
WT	SOS1	TRG 2 h	1	0.605	0.059 - 5.675	0.007 - 19.293	0.532	
WT	SOS2	TRG 2 h	1	1.078	0.023 - 17.665	0.004 - 86.823	0.944	
WT	SOS3	TRG 2 h	1	0				
WT	RD29A	TRG 2 h	0.98	0.277	0.044 - 1.375	0.017 - 4.455	0.032	DOWN
WT	<i>AtNHX1</i>	TRG 2 h	1	1.144	0.875 - 1.549	0.727 - 2.173	0.261	
WT	<i>AtP5CS1</i>	TRG 2 h	0.96	6.423	4.862 - 9.019	3.284 - 12.286	0	UP
L1	<i>VuWRKY21</i>	TRG 2 h	1	1.136	0.259 - 3.461	0.182 - 18.896	0.773	
L1	SOS1	TRG 2 h	1	1.839	1.247 - 2.549	0.818 - 5.098	0.001	UP
L1	SOS2	TRG 2 h	1	1.070	0.291 - 4.351	0.089 - 8.694	0.881	
L1	SOS3	TRG 2 h	1	1.711	0.632 - 4.823	0.356 - 13.833	0.149	

L1	RD29A	TRG 2 h	0.98	10.498	5.133 - 24.348	2.471 - 36.647	0	UP
L1	<i>AtNHX1</i>	TRG 2 h	1	1.019	0.483 - 2.110	0.332 - 4.084	0.938	
L1	<i>AtP5CS1</i>	TRG 2 h	0.96	4.500	1.635 - 18.457	0.998 - 28.821	0	UP
L2	<i>VuWRKY21</i>	TRG 2 h	1	0.37	0.072 - 1.381	0.024 - 3.531	0.064	
L2	SOS1	TRG 2 h	1	1.566	1.079 - 2.311	0.774 - 2.789	0.004	UP
L2	SOS2	TRG 2 h	1	0.645	0.115 - 4.248	0.061 - 6.190	0.424	
L2	SOS3	TRG 2 h	1	0.427	0.189 - 1.049	0.113 - 2.282	0.015	DOWN
L2	RD29A	TRG 2 h	0.98	2.404	0.750 - 7.120	0.466 - 25.099	0.04	UP
L2	<i>AtNHX1</i>	TRG 2 h	1	1.828	0.762 - 4.809	0.384 - 8.815	0.064	
L2	<i>AtP5CS1</i>	TRG 2 h	0.96	10.488	2.768 - 37.11	1.727 - 109.068	0	UP
L3	<i>VuWRKY21</i>	TRG 2 h	1	0.616	0.009 - 7.442	0.005 - 16.111	0.675	
L3	SOS1	TRG 2 h	1	1.494	0.781 - 3.262	0.532 - 6.105	0.102	
L3	SOS2	TRG 2 h	1	0.844	0.159 - 2.455	0.079 - 6.821	0.695	
L3	SOS3	TRG 2 h	1	1.293	0.410 - 3.217	0.165 - 18.507	0.56	
L3	RD29A	TRG 2 h	0.98	16.094	3.273- 107.26	0.480 - 168.350	0.001	UP
L3	<i>AtNHX1</i>	TRG 2 h	1	2.487	1.171 - 4.954	0.790 - 7.727	0	UP
L3	<i>AtP5CS1</i>	TRG 2 h	0.96	29.405	8.413 - 122.35	3.322 - 314.127	0	UP
WT	<i>VuWRKY21</i>	TRG 4 h	1	0.325	0.084 - 1.535	0.046 - 8.056	0.041	DOWN
WT	SOS1	TRG 4 h	1	5.639	0.966 - 44.364	0.603 - 176.069	0.008	UP
WT	SOS2	TRG 4 h	1	0.765	0.305 - 1.669	0.139 - 3.655	0.356	
WT	SOS3	TRG 4 h	1	1.372	0.434 - 5.823	0.321 - 13.454	0.466	
WT	RD29A	TRG 4 h	0.98	21.415	5.456 - 70.215	3.631 - 171.819	0	UP
WT	<i>AtNHX1</i>	TRG 4 h	1	2.346	0.996 - 5.169	0.693 - 13.177	0.01	UP
WT	<i>AtP5CS1</i>	TRG 4 h	0.96	7.471	1.991 - 29.423	0.623 - 160.200	0.001	UP
L1	<i>VuWRKY21</i>	TRG 4 h	1	0	0.000 - 0.003	0.000 - 0.087	0	DOWN
L1	SOS1	TRG 4 h	1	0.801	0.323 - 1.913	0.119 - 4.028	0.496	
L1	SOS2	TRG 4 h	1	0.285	0.136 - 0.496	0.084 - 1.474	0.001	DOWN
L1	SOS3	TRG 4 h	1	0.285	0.136 - 0.496	0.084 - 1.474	0.001	DOWN
L1	RD29A	TRG 4 h	0.98	13.366	0.215-134.901	0.064 - 223.883	0.021	UP
L1	<i>AtNHX1</i>	TRG 4 h	1	0.22	0.014 - 1.852	0.005 - 2.621	0.091	
L1	<i>AtP5CS1</i>	TRG 4 h	0.96	0.37	0.058 - 9.707	0.038 - 11.994	0.207	
L2	<i>VuWRKY21</i>	TRG 4 h	1	1.538	0.390 6.800	0.040 - 14.320	0.427	
L2	SOS1	TRG 4 h	1	0.917	0.443 - 1.667	0.218 - 3.918	0.757	
L2	SOS2	TRG 4 h	1	1.728	0.595 - 5.097	0.224 - 15.032	0.156	
L2	SOS3	TRG 4 h	1	1.728	0.595 - 5.097	0.224 - 15.032	0.156	
L2	RD29A	TRG 4 h	0.98	42.933	16.073-109.76	8.688 - 249.317	0	UP
L2	<i>AtNHX1</i>	TRG 4 h	0.948	0.503 -1.63	0.344 - 2.297	0.799		
L2	<i>AtP5CS1</i>	TRG 4 h	0.96	2.735	0.613 - 15.691	0.231 - 42.747	0.085	
L3	<i>VuWRKY21</i>	TRG 4 h	1	0.855	0.448 - 1.670	0.261 - 2.789	0.49	
L3	SOS1	TRG 4 h	1	0.579	0.056 - 1.963	0.015 - 8.634	0.388	
L3	SOS2	TRG 4 h	1	0.27	0.201 - 0.395	0.090 - 0.457	0	DOWN
L3	SOS3	TRG 4 h	1	0.27	0.201 - 0.395	0.090 - 0.457	0	DOWN
L3	RD29A	TRG 4 h	0.98	2.162	1.025 - 4.381	0.532 - 6.372	0.005	
L3	<i>AtNHX1</i>	TRG 4 h	1	1.601	0.782 - 3.496	0.470 - 5.063	0.066	
L3	<i>AtP5CS1</i>	TRG 4 h	0.96	2.617	1.075 - 6.319	0.541 - 11.432	0.006	UP

WT	<i>VuWRKY21</i>	TRG 8 h	1	0				
WT	SOS1	TRG 8 h	1	2.317	1.070 - 4.966	0.582 - 9.849	0.005	UP
WT	SOS2	TRG 8 h	1	2.109	1.314 - 3.129	0.727 - 3.605	0.003	UP
WT	SOS3	TRG 8 h	1	0				
WT	RD29A	TRG 8 h	0.98	2	1.314 - 3.129	0.727 - 3.605	0.003	UP
WT	<i>AtNHX1</i>	TRG 8 h	1	1.104	0.641 - 1.922	0.337 - 2.532	0.606	
WT	<i>AtP5CS1</i>	TRG 8 h	0.96	4.015	1.726 - 7.977	1.347 - 17.882	0	UP
L1	<i>VuWRKY21</i>	TRG 8 h	1	1	0			
L1	SOS1	TRG 8 h		0.741	0.194 - 1.957	0.131 - 2.751	0.398	
L1	SOS2	TRG 8 h		2.336	1.430 - 3.918	0.812 - 5.696	0.001	UP
L1	SOS3	TRG 8 h	1	0				
L1	RD29A	TRG 8 h		0.909	0.168 - 5.826	0.059 - 16.486	0.864	
L1	<i>AtNHX1</i>	TRG 8 h	1	0.561	0.137 - 1.682	0.100 - 3.204	0.151	
L1	<i>AtP5CS1</i>	TRG 8 h	0.96	0				
L2	<i>VuWRKY21</i>	TRG 8 h	1	2.048	1.139 - 3.605	0.818 - 5.856	0.002	UP
L2	SOS1	TRG 8 h	1	1.245	0.495 - 3.297	0.354 - 5.736	0.484	
L2	SOS2	TRG 8 h	1	2.303	0.914 - 7.317	0.540 - 11.004	0.022	UP
L2	SOS3	TRG 8 h	1	0.647	0.463 - 0.871	0.355 - 1.137	0	DOWN
L2	RD29A	TRG 8 h	0.98	17.579	8.264 - 34.262	4.515 - 44.457	0	UP
L2	<i>AtNHX1</i>	TRG 8 h	1	1.697	1.229 - 2.362	1.050 - 3.272	0	UP
L2	<i>AtP5CS1</i>	TRG 8 h	0.96	5.432	2.929 - 10.007	1.685 - 18.035	0	UP
L3	<i>VuWRKY21</i>	TRG 8 h	1	0.94	0.447 - 1.486	0.354 - 2.949	0.794	
L3	SOS1	TRG 8 h	1	1.289	0.851 - 2.018	0.655 - 3.053	0.119	
L3	SOS2	TRG 8 h	1	0				
L3	SOS3	TRG 8 h	1	0				
L3	RD29A	TRG 8 h	0.98	9.874	0.784 - 44.370	0.468 - 55.185	0.008	
L3	<i>AtNHX1</i>	TRG 8 h	1	1.447	1.064 - 1.963	0.717 - 2.313	0.005	UP
L3	<i>AtP5CS1</i>	TRG 8 h	0.96	9.925	3.183 - 29.350	1.270 - 97.576	0.001	UP
WT	Ubiquitin	REF 1 H	1	1				
L1	Ubiquitin	REF 1 H	1	1				
L2	Ubiquitin	REF 1 H	1	1				
L3	Ubiquitin	REF 1 H	1	1				
WT	Ubiquitin	REF 2 H	1	1				
L1	Ubiquitin	REF 2 H	1	1				
L2	Ubiquitin	REF 2 H	1	1				
L3	Ubiquitin	REF 2 H	1	1				
WT	Ubiquitin	REF 4 H	1	1				
L1	Ubiquitin	REF 4 H	1	1				
L2	Ubiquitin	REF 4 H	1	1				
L3	Ubiquitin	REF 4 H	1	1				
WT	Ubiquitin	REF 8 H	1	1				
L1	Ubiquitin	REF 8 H	1	1				
L2	Ubiquitin	REF 8 H	1	1				
L3	Ubiquitin	REF 8 H	1	1				

Table S4. Expression values (FC and related data) of *VuWRKY87* gene expression analysis in *Arabidopsis* transgenic lines and WT, by qPCR technique. The values from the REST analysis are related to four times after stress imposition (1, 2, 4 and 8 h) compared to control. Abbreviations: REF = Reference gene; TRG = Target.

	Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
WT	<i>VuWRKY87</i>	TRG 1 h	1	0				
WT	SOS1	TRG 1 h	0.62	1.815	0.100 - 48.803	0.069 - 69.425	0.542	
WT	SOS2	TRG 1 h	0.62	1.926	0.082 - 99.981	0.034 - 110.852	0.557	
WT	SOS3	TRG 1 h	0.59	2.426	0.094 - 127.433	0.036 - 211.815	0	
WT	RD29A	TRG 1 h	0.6	0.201	0.026 - 7.229	0.018 - 9.948	0.092	
WT	<i>AtNHX1</i>	TRG 1 h	0.62	2.072	1.451 - 2.773	1.028 - 3.780	0	UP
WT	<i>AtP5CS1</i>	TRG 1 h	0.59	1.478	1.094 - 2.048	0.850 - 3.080	0.002	UP
L1	<i>VuWRKY87</i>	TRG 1 h	1	0				
L1	SOS1	TRG 1 h	0.62	1.615	0.088 - 42.357	0.057 - 67.928	0.628	
L1	SOS2	TRG 1 h	0.62	1.556	0.060 - 74.752	0.024 - 108.923	0.682	
L1	SOS3	TRG 1 h	0.59	1.533	0.059 - 75.140	0.020 - 220.186	0.708	
L1	RD29A	TRG 1 h	0.6	0.16	0.021 - 6.446	0.014 - 8.039	0.057	
L1	<i>AtNHX1</i>	TRG 1 h	0.62	1.998	1.463 - 2.876	1.083 - 3.294	0	UP
L1	<i>AtP5CS1</i>	TRG 1 h	0.59	0.99	0.646 - 1.604	0.492 - 2.007	0.957	
L2	<i>VuWRKY87</i>	TRG 1 h	1	0	0.213 - 0.782	0.144 - 1.093	0.005	DOWN
L2	SOS1	TRG 1 h	0.62	4.431	0.190 - 26.675	0.118 - 38.203	0.076	
L2	SOS2	TRG 1 h	0.62	10.121	0.285 - 88.497	0.110 - 122.222	0.018	UP
L2	SOS3	TRG 1 h	0.59	7.489	0.224 - 56.373	0.131 - 104.397	0.034	UP
L2	RD29A	TRG 1 h	0.6	2.327	1.405 - 4.019	1.084 - 6.323	0	UP
L2	<i>AtNHX1</i>	TRG 1 h	0.62	1.536	0.872 - 2.521	0.424 - 2.991	0.05	UP
L2	<i>AtP5CS1</i>	TRG 1 h	0.59	2.028	1.175 - 3.311	0.817 - 5.096	0.001	UP
L3	<i>VuWRKY87</i>	TRG 1 h	1	0				
L3	SOS1	TRG 1 h	0.62	0.691	0.489 - 0.970	0.339 - 1.087	0.003	DOWN
L3	SOS2	TRG 1 h	0.62	0.83	0.643 - 1.045	0.534 - 1.454	0.069	
L3	SOS3	TRG 1 h	0.59	0.933	0.517 - 1.932	0.203 - 3.816	0.782	
L3	RD29A	TRG 1 h	0.6	0.832	0.442 - 1.608	0.227 - 2.293	0.417	
L3	<i>AtNHX1</i>	TRG 1 h	0.62	1.025	0.640 - 1.523	0.540 - 2.041	0.87	
L3	<i>AtP5CS1</i>	TRG 1 h	0.59	1.573	1.117 - 2.268	0.890 - 2.990	0.001	UP
WT	<i>VuWRKY87</i>	TRG 2 h	1	0				
WT	SOS1	TRG 2 h	1	0.342	0.222 - 0.506	0.158 - 0.843	0.002	DOWN
WT	SOS2	TRG 2 h	1	0.465	0.282 - 0.771	0.218 - 1.347	0.009	DOWN
WT	SOS3	TRG 2 h	0.93	0.269	0.140 - 0.580	0.083 - 0.760	0.001	DOWN
WT	RD29A	TRG 2 h	0.98	0.559	0.420 - 0.863	0.357 - 1.145	0.007	DOWN
WT	<i>AtNHX1</i>	TRG 2 h	1	0.533	0.371 - 0.689	0.306 - 1.074	0.005	DOWN
WT	<i>AtP5CS1</i>	TRG 2 h	0.96	0.578	0.287 - 1.092	0.201 - 1.370	0.083	
L1	<i>VuWRKY87</i>	TRG 2 h	1	0				
L1	SOS1	TRG 2 h	0.62	0.535	0.405 - 0.701	0.314 - 0.895	0	DOWN
L1	SOS2	TRG 2 h	0.62	0.559	0.403 - 0.788	0.320 - 1.064	0	DOWN
L1	SOS3	TRG 2 h	0.59	0.315	0.229 - 0.470	0.174 - 0.528	0	DOWN

L1	RD29A	TRG 2 h	0.6	0.725	0.400 - 1.142	0.339 - 1.770	0.063	
L1	<i>AtNHX1</i>	TRG 2 h	0.62	0.601	0.492 - 0.763	0.399 - 0.895	0	DOWN
L1	<i>AtP5CS1</i>	TRG 2 h	0.59	0.863	0.520 - 1.363	0.334 - 1.806	0.365	
L2	<i>VuWRKY87</i>	TRG 2 h	1	0.84	0.617 - 1.116	0.527 - 1.388	0.18	
L2	SOS1	TRG 2 h	0.62	1.213	0.758 - 2.043	0.617 - 2.183	0.168	
L2	SOS2	TRG 2 h	0.62	0.943	0.576 - 1.518	0.376 - 2.712	0.741	
L2	SOS3	TRG 2 h	0.59	0.649	0.245 - 1.491	0.152 - 3.564	0.184	
L2	RD29A	TRG 2 h	0.6	1.262	0.654 - 2.658	0.482 - 3.811	0.319	
L2	<i>AtNHX1</i>	TRG 2 h	0.62	1.126	0.807 - 1.487	0.677 - 1.747	0.227	
L2	<i>AtP5CS1</i>	TRG 2 h	0.59	1.723	0.781 - 2.964	0.674 - 5.823	0.023	UP
L3	<i>VuWRKY87</i>	TRG 2 h	1	0.608	0.284 - 1.291	0.205 - 2.454	0.145	
L3	SOS1	TRG 2 h	1	1.142	1.015 - 1.386	0.732 - 1.610	0.069	
L3	SOS2	TRG 2 h	0.62	1.025	0.711 - 1.509	0.579 - 1.985	0.848	
L3	SOS3	TRG 2 h	0.59	0.638	0.375 - 1.282	0.245 - 1.773	0.039	DOWN
L3	RD29A	TRG 2 h	0.6	2.289	1.303 - 4.023	1.029 - 5.864	0	UP
L3	<i>AtNHX1</i>	TRG 2 h	0.62	1.148	0.834 - 1.546	0.693 - 2.108	0.211	
L3	<i>AtP5CS1</i>	TRG 2 h	0.59	1.216	0.961 - 1.884	0.244 - 2.454	0.388	
WT	<i>VuWRKY87</i>	TRG 4 h	1	0				
WT	SOS1	TRG 4 h	0.62	0.914	0.642 - 1.370	0.519 - 1.873	0.487	
WT	SOS2	TRG 4 h	0.62	0.681	0.561 - 0.811	0.429 - 0.913	0	DOWN
WT	SOS3	TRG 4 h	0.59	0.481	0.311 - 0.781	0.252 - 0.990	0	DOWN
WT	RD29A	TRG 4 h	0.6	2.665	1.513 - 4.150	1.119 - 5.492	0	UP
WT	<i>AtNHX1</i>	TRG 4 h	0.62	0.812	0.630 - 1.052	0.458 - 1.256	0.039	DOWN
WT	<i>AtP5CS1</i>	TRG 4 h	0.59	1.918	1.567 - 2.872	0.538 - 3.796	0.001	UP
L1	<i>VuWRKY87</i>	TRG 4 h	1	0				
L1	SOS1	TRG 4 h	0.62	0.577	0.337 - 0.965	0.265 - 1.392	0.012	DOWN
L1	SOS2	TRG 4 h	0.62	0.619	0.368 - 0.971	0.279 - 1.285	0.009	DOWN
L1	SOS3	TRG 4 h	0.59	0.372	0.226 - 0.586	0.158 - 0.857	0.001	DOWN
L1	RD29A	TRG 4 h	0.6	2.363	1.733 - 3.275	1.436 - 4.021	0	UP
L1	<i>AtNHX1</i>	TRG 4 h	0.62	0.74	0.482 - 1.070	0.436 - 2.008	0.047	DOWN
L1	<i>AtP5CS1</i>	TRG 4 h	0.59	1.660	1.172 - 2.370	0.919 - 3.553	0	UP
L2	<i>VuWRKY87</i>	TRG 4 h	1	1.382	1.133 - 1.656	1.109 - 1.787	0	UP
L2	SOS1	TRG 4 h	0.62	0.763	0.523 - 1.127	0.407 - 1.815	0.074	
L2	SOS2	TRG 4 h	0.62	0.322	0.196 - 0.585	0.151 - 1.022	0	DOWN
L2	SOS3	TRG 4 h	0.59	0.456	0.278 - 0.652	0.203 - 1.254	0.001	DOWN
L2	RD29A	TRG 4 h	0.6	1.948	1.057 - 3.549	0.369 - 9.112	0.026	UP
L2	<i>AtNHX1</i>	TRG 4 h	0.62	0.706	0.480 - 1.099	0.393 - 1.448	0.021	DOWN
L2	<i>AtP5CS1</i>	TRG 4 h	0.59	1.868	1.241 - 3.294	0.943 - 5.513	0	UP
L3	<i>VuWRKY87</i>	TRG 4 h	1	0.89	0.361 - 1.984	0.238 - 2.551	0.711	
L3	SOS1	TRG 4 h	1	0.815	0.448 - 1.310	0.363 - 1.744	0.252	
L3	SOS2	TRG 4 h	0.62	0.779	0.532 - 1.224	0.364 - 1.587	0.096	
L3	SOS3	TRG 4 h	0.59	0.464	0.210 - 1.089	0.059 - 1.925	0.027	DOWN
L3	RD29A	TRG 4 h	0.6	4.215	1.565 - 9.214	1.148 - 16.808	0	UP
L3	<i>AtNHX1</i>	TRG 4 h	0.62	0.832	0.495 - 1.374	0.305 - 1.765	0.322	
L3	<i>AtP5CS1</i>	TRG 4 h	0.59	1.909	1.120 - 3.466	0.876 - 5.853	0.004	UP

WT	<i>VuWRKY87</i>	TRG 8 h	1	0				
WT	SOS1	TRG 8 h	0.62	1.472	1.020 - 2.041	0.653 - 3.059	0.008	UP
WT	SOS2	TRG 8 h	0.62	1.609	1.188 - 2.165	1.039 - 3.250	0	UP
WT	SOS3	TRG 8 h	0.59	0.965	0.631 - 1.594	0.519 - 2.130	0.809	
WT	RD29A	TRG 8 h	0.6	3.120	1.599 - 6.732	0.833 - 8.275	0	UP
WT	<i>AtNHX1</i>	TRG 8 h	0.62	0.899	0.935 - 1.416	0.088 - 1.748	0.992	
WT	<i>AtP5CS1</i>	TRG 8 h	0.59	1.328	1.012 - 1.825	0.658 - 2.452	0.022	UP
L1	<i>VuWRKY87</i>	TRG 8 h	1	1.096	0.865 - 1.433	0.784 - 1.561	0.399	
L1	SOS1	TRG 8 h	0.62	0.89	0.537 - 1.513	0.391 - 2.011	0.473	
L1	SOS2	TRG 8 h	0.62	1.039	0.665 - 1.880	0.432 - 3.397	0.839	
L1	SOS3	TRG 8 h	0.59	0.491	0.253 - 1.030	0.181 - 1.632	0.008	DOWN
L1	RD29A	TRG 8 h	0.6	3.983	1.427 - 8.810	0.942 - 14.061	0.001	UP
L1	<i>AtNHX1</i>	TRG 8 h	0.62	0.38	0.032 - 1.946	0.014 - 3.029	0.172	
L1	<i>AtP5CS1</i>	TRG 8 h	0.59	2.971	1.900 - 4.641	1.214 - 6.359	0	UP
L2	<i>VuWRKY87</i>	TRG 8 h	1	0				
L2	SOS1	TRG 8 h	0.62	1.016	0.763 - 1.327	0.688 - 1.574	0.853	
L2	SOS2	TRG 8 h	0.62	0.926	0.812 - 1.277	0.233 - 1.731	0.839	
L2	SOS3	TRG 8 h	0.59	0.533	0.266 - 1.174	0.218 - 1.557	0.011	DOWN
L2	RD29A	TRG 8 h	0.6	0.79	0.376 - 1.371	0.281 - 1.959	0.253	
L2	<i>AtNHX1</i>	TRG 8 h	0.62	0.756	0.631 - 0.899	0.576 - 1.009	0	DOWN
L2	<i>AtP5CS1</i>	TRG 8 h	0.59	2.844	1.719 - 4.504	1.349 - 6.620	0	UP
L3	<i>VuWRKY87</i>	TRG 8 h	1	0				
L3	SOS1	TRG 8 h	0.62	1	0.533 - 0.961	0.409 - 1.074	0.004	DOWN
L3	SOS2	TRG 8 h	0.62	0.483	0.401 - 0.914	0.031 - 1.138	0.001	DOWN
L3	SOS3	TRG 8 h	0.59	0.647	0.462 - 0.874	0.355 - 1.063	0.001	DOWN
L3	RD29A	TRG 8 h	0.6	3.598	1.186 - 9.015	0.913 - 11.265	0	UP
L3	<i>AtNHX1</i>	TRG 8 h	0.62	0.868	0.761 - 1.101	0.383 - 1.239	0.212	
L3	<i>AtP5CS1</i>	TRG 8 h	0.59	1.532	1.003 - 2.153	0.790 - 3.131	0.007	UP
WT	Ubiquitin	REF 1 H	1	1				
L1	Ubiquitin	REF 1 H	1	1				
L2	Ubiquitin	REF 1 H	1	1				
L3	Ubiquitin	REF 1 H	1	1				
WT	Ubiquitin	REF 2 H	1	1				
L1	Ubiquitin	REF 2 H	1	1				
L2	Ubiquitin	REF 2 H	1	1				
L3	Ubiquitin	REF 2 H	1	1				
WT	Ubiquitin	REF 4 H	1	1				
L1	Ubiquitin	REF 4 H	1	1				
L2	Ubiquitin	REF 4 H	1	1				
L3	Ubiquitin	REF 4 H	1	1				
WT	Ubiquitin	REF 8 H	1	1				
L1	Ubiquitin	REF 8 H	1	1				
L2	Ubiquitin	REF 8 H	1	1				
L3	Ubiquitin	REF 8 H	1	1				

Table S5. Subcellular location, molecular weight (kDA) and isoelectric point of proteins VuWRKY21 and VuWRKY87.

ID	Subcellular location	Number of amino acids (aa)	Isoelectric point	Molecular weight (WM)	Signal peptide
WRKY 21	Nucleus	317	8.23	35.36	0.0005
WRKY 87	Nucleus	353	5.67	39.36	0.0007

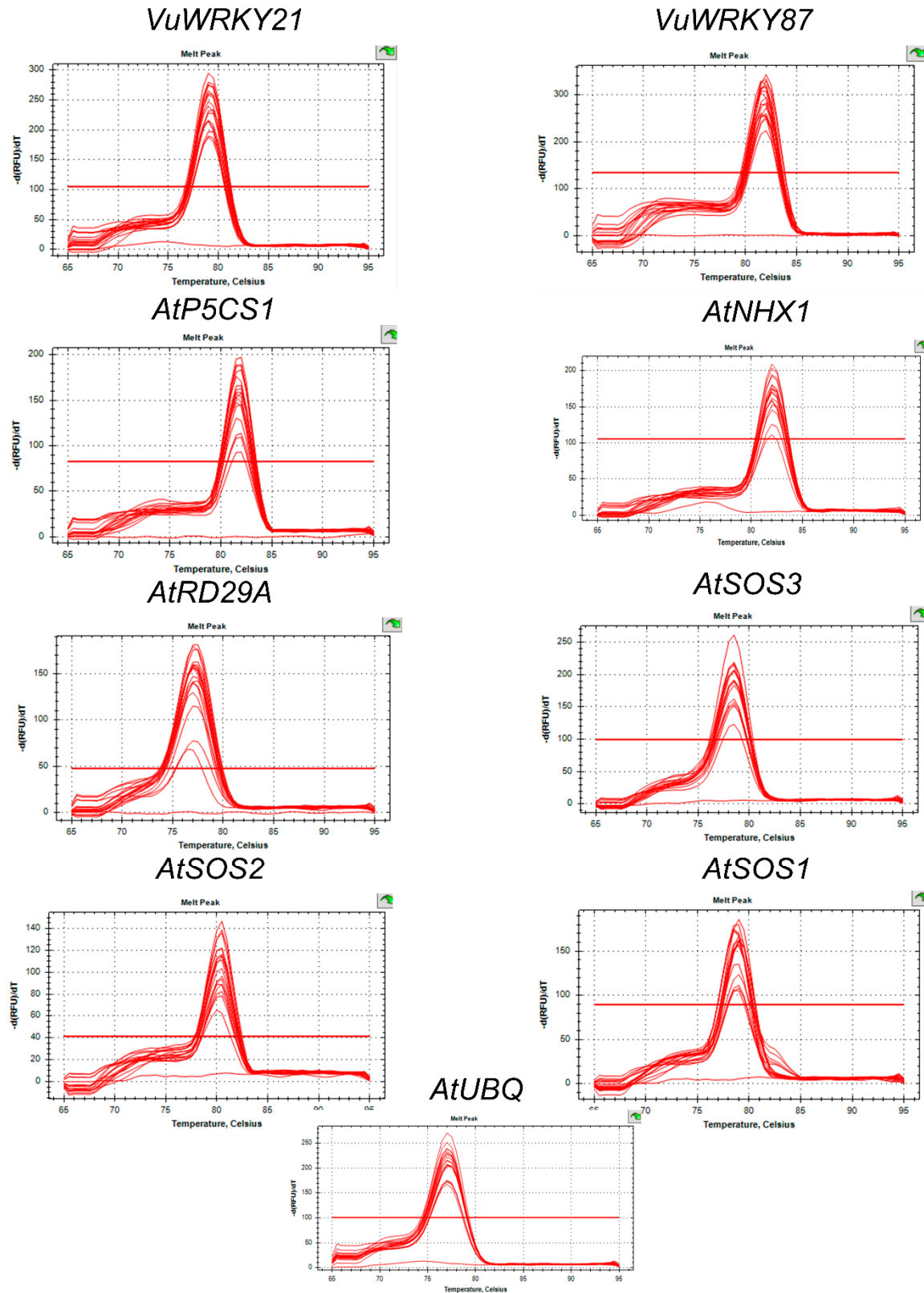


Figure S1. Melting curve of primers for all genes used in the *VuWRKY21* and 87 expression analysis in *Arabidopsis* transgenic lines and WT, via qPCR.

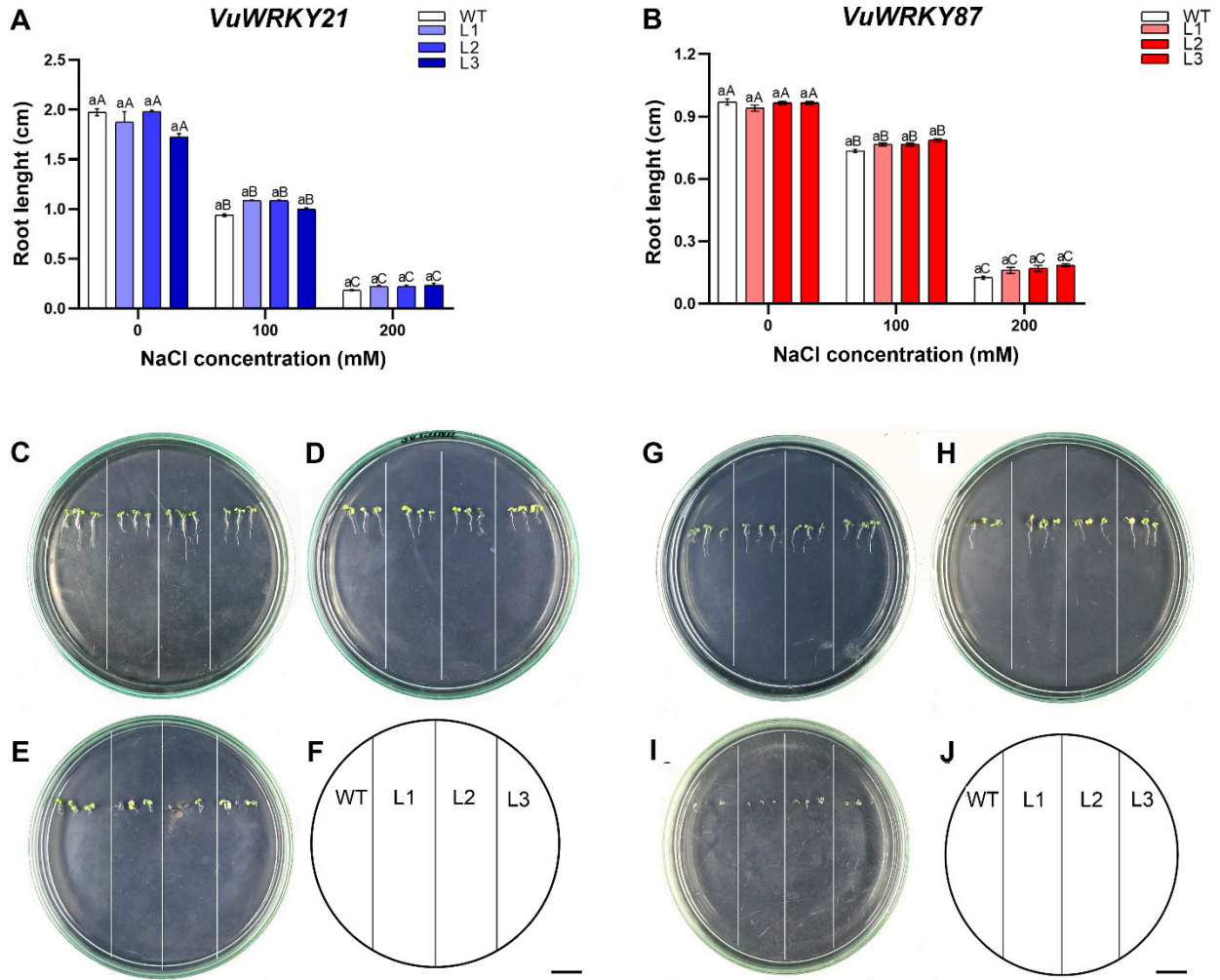


Figure S2. Average of root length of *Arabidopsis* transgenic lines carrying *VuWRKY21* (A) and *VuWRKY87* (B) genes (L1, L2, L3) and wild type (WT) plants under varying NaCl concentrations: 0 mM, 100 mM, and 200 mM. This test was performed with three biological replicates, each comprising 20 seeds. (C-J) Root length of *A. thaliana* seedlings carrying the *VuWRKY21* (C-E) and *VuWRKY87* (G-I) genes (L1, L2, L3) and the WT, germinated under different NaCl concentrations: 0 mM (C, G); 100 mM (D, H); and 200 mM (E, I), after seven days cultivation. Identical letters indicate no statistical difference among the observed time points (A and B). Blue bars (A) correspond to results for *VuWRKY21* transgenic lines, and red bars (B) represent *VuWRKY87* transgenic lines.