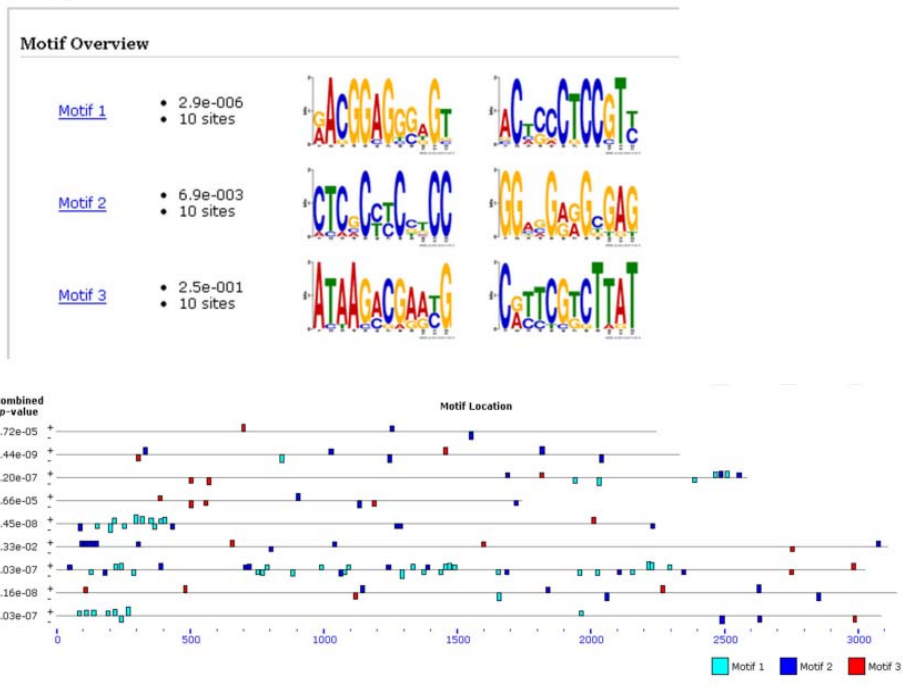


DISCOVERED MOTIFS



Appendix A Over-represented motifs in root-specific regulatory regions. Two genes including Os03g01700 and Os02g37190 previously reported to be root-specific expressed (Li et al. Isolation and characterization of two novel root-specific promoters in rice (*Oryza sativa* L.). *Plant Science* 207 (2013) 37-44) were included in the analysis.

Appendix B Over-represented motif in root-specific promoters

Factor or Site Name	Signal Sequence	SITE #	Feature	Reference	NO. in rRSP1	NO. in rRSP2	NO. in rRSP3	NO. in rRSP4	NO. in rRSP5
ROOTMOTIFTAPOX1	ATATT	S000098	root; rolD;	Transgenic Res 4:388-396 (1995)	20	21	9	12	5
OSE1/2ROOTNODULE	AAAGAT/CTCTT	S000468/S000467	leghemoglobin; Lb29; root; nodule; arbuscule	Mol Plant Microbe Interact. 17: 62-69 (2004)	8	4	8	7	10
RHERPATEXPA7	(GT)CACG(AT)	S000512	root; hair	Plant Cell. 18:2958-2970 (2006)	7	0	3	2	2
SURECOREATSULTR11	GAGAC	S000499	sulfate uptake; sulfate transporter; ARF; -S; S	Plant J. 42: 305-314 (2005)	1	4	6	6	7
CAATBOX1	CCAAT	S000030	HSE (Heat shock element); CCAAT box;	Mol Gen Genet. 231: 226-232 (1992); Plant Physiol. 129: 1138-1149 (2002)	3	5	27	2	17
CACTFTPPCA1	(CT)ACT	S000449	mesohpyll; CACT;	Plant Cell. 16:1077-1090(2004)	35	36	34	24	35

Appendix C Information of primers used in gene expression analysis and promoter cloning.

Primer Name	Oligonucleotide Sequence (5'-3')
RSG1-RT-F	5'-CTGGCAACTGGGTCTACTGG-3'
RSG1-RT-R	5'-TTAAGCGTAGTCCTGGTCGG-3'
RSG2-RT-F	5'-GAGCCATCTGGGACTTCAT-3'
RSG2-RT-R	5'-GCACCGTTGGTACGTTTG-3'
RSG3-RT-F	5'-GCATTCGAGGGCAGACATAC-3'
RSG3-RT-R	5'-GCGCCTTCCTTCCATTGATC-3'
RSG4-RT-F	5'-ACATTATCCGGGAGTGCGTC-3'
RSG4-RT-R	5'-ACTCGGTGGTCATGAGGTAG-3'
RSG5-RT-F	5'-GCAAGTTCGCAACCAGG-3'
RSG5-RT-R	5'-GGCGAGGATGTTGCGGTAG-3'
RSG6-RT-F	5'-CTCTACCAAGGGAGTGCCA-3'
RSG6-RT-R	5'-CAAATAGCCATACATTCACG-3'
RSG7-RT-F	5'-TGCGGGTGGCAAAGTATG-3'
RSG7-RT-R	5'-TCTTTGGGTAATGCGTTTGTG-3'
GUS-RT-F	5'-ACTGCTGCTGTCGGCTTTA-3'
GUS-RT-R	5'-CACCTTGCGGACGGGTAT-3'
ACTIN-RT-F	5'-GACTCTGGTGATGGTGTACAGC-3'
ACTIN-RT-R	5'-GGCTGGAAGAGGACCTCAGG-3'
rRSP1-attB1-F	5'-GGGACAAGTTTGTACAAAAAGCAGGCTGC CAAGAAACTAAGCAAAGAAGGAA-3'
rRSP1-attB2-R	5'-GGGACCACCTTTGTACAAGAAAGCTGGGT CTCTGATAAGTGTGGAGAGGTCTCT-3'
rRSP2-attB1-F	5'-GGGACAAGTTTGTACAAAAAGCAGGCTGC AGCAAACCGAACTATTAGTTGTCG-3'
rRSP2-attB2-R	5'-GGGACCACCTTTGTACAAGAAAGCTGGGT CTTCTTCTTCTTCGATCGACCAC-3'
rRSP3-attB1-F	5'-GGGACAAGTTTGTACAAAAAGCAGGCTGC TTGTAGTGCTTATGTGCTCCCT-3'
rRSP3-attB2-R	5'-GGGACCACCTTTGTACAAGAAAGCTGGGT CCCTGGTCCTCGTCCCG-3'
rRSP4-attB1-F	5'-GGGACAAGTTTGTACAAAAAGCAGGCTGC GGGGTCGGATGTATAGCG-3'
rRSP4-attB2-R	5'-GGGACCACCTTTGTACAAGAAAGCTGGGT CTCCGATGTCTCTCTCTAAACTC-3'
rRSP5-attB1-F	5'-GGGACAAGTTTGTACAAAAAGCAGGCTGC GGCACCGAATAATCCGTCAG-3'
rRSP5-attB2-R	5'-GGGACCACCTTTGTACAAGAAAGCTGGGT CTCTACCTCACAAGAGGTATCACA-3'
A2P-attB1-F	5'-GGGACAAGTTTGTACAAAAAGCAGGCTGC GTCGAGGTCATTCATATGCTTG-3'
A2P-attB2-R	5'-GGGACCACCTTTGTACAAGAAAGCTGGGTATCGTCTACCTACAAAAAGCTCC-3'