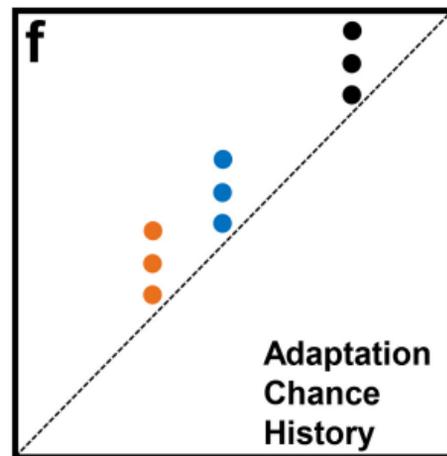
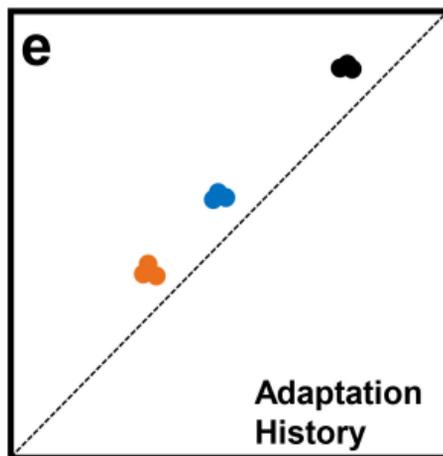
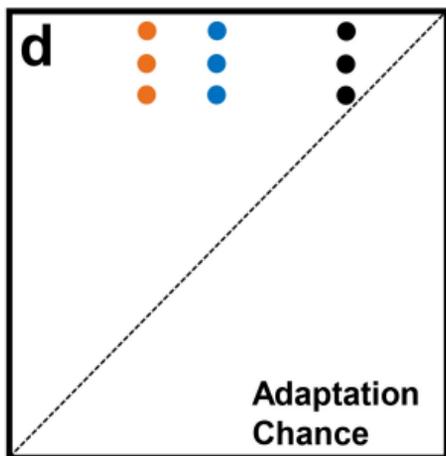
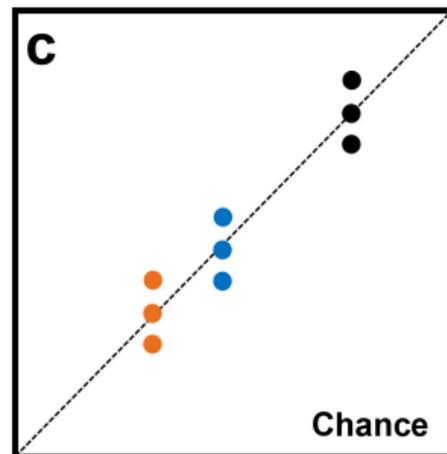
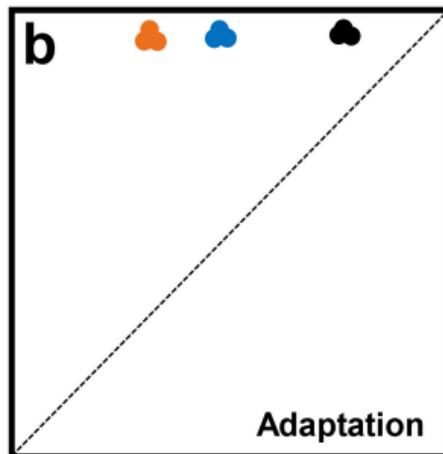
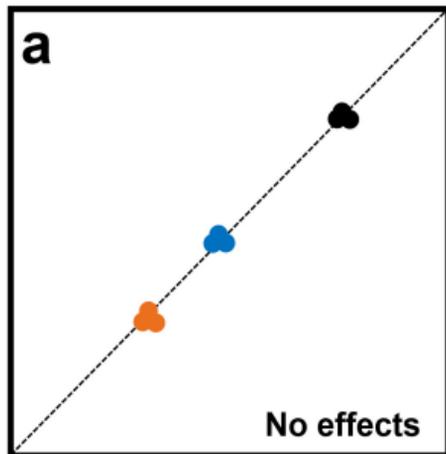
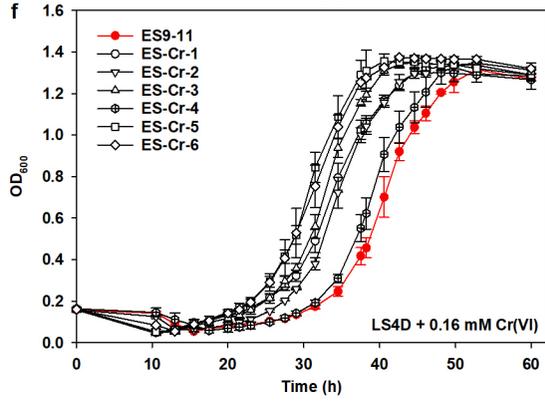
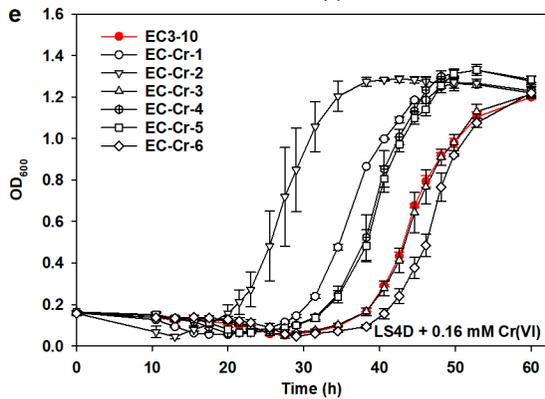
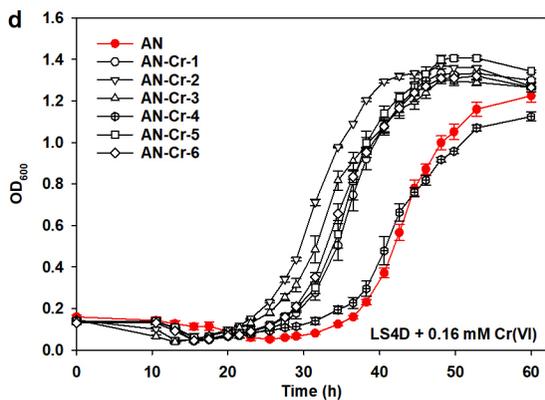
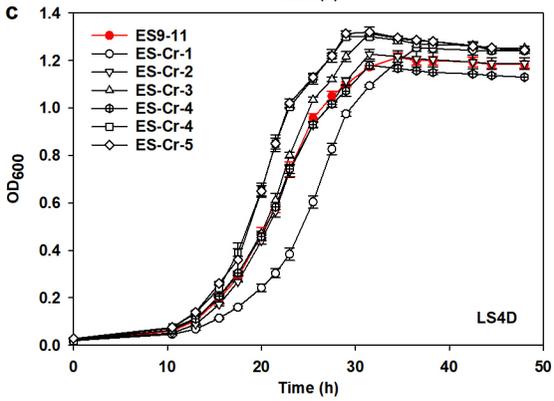
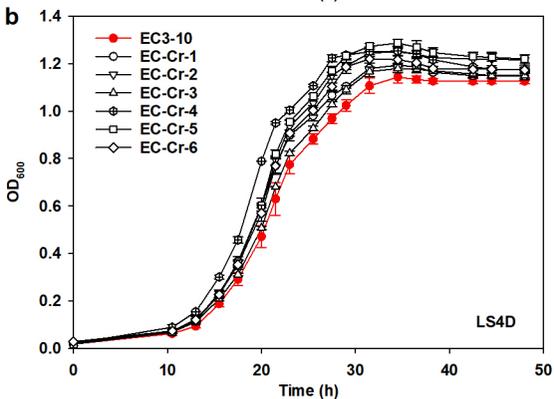
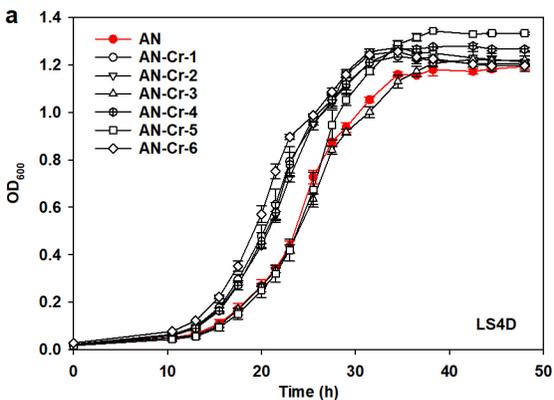
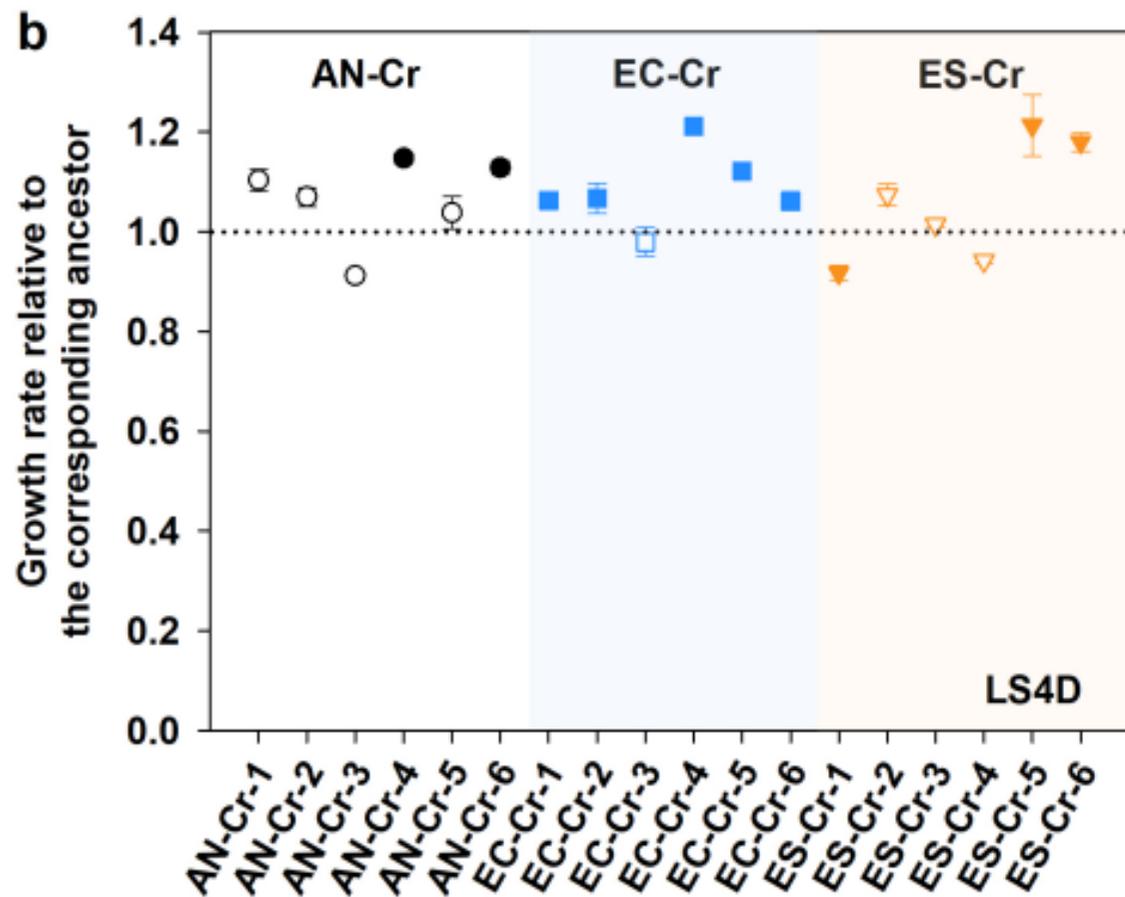
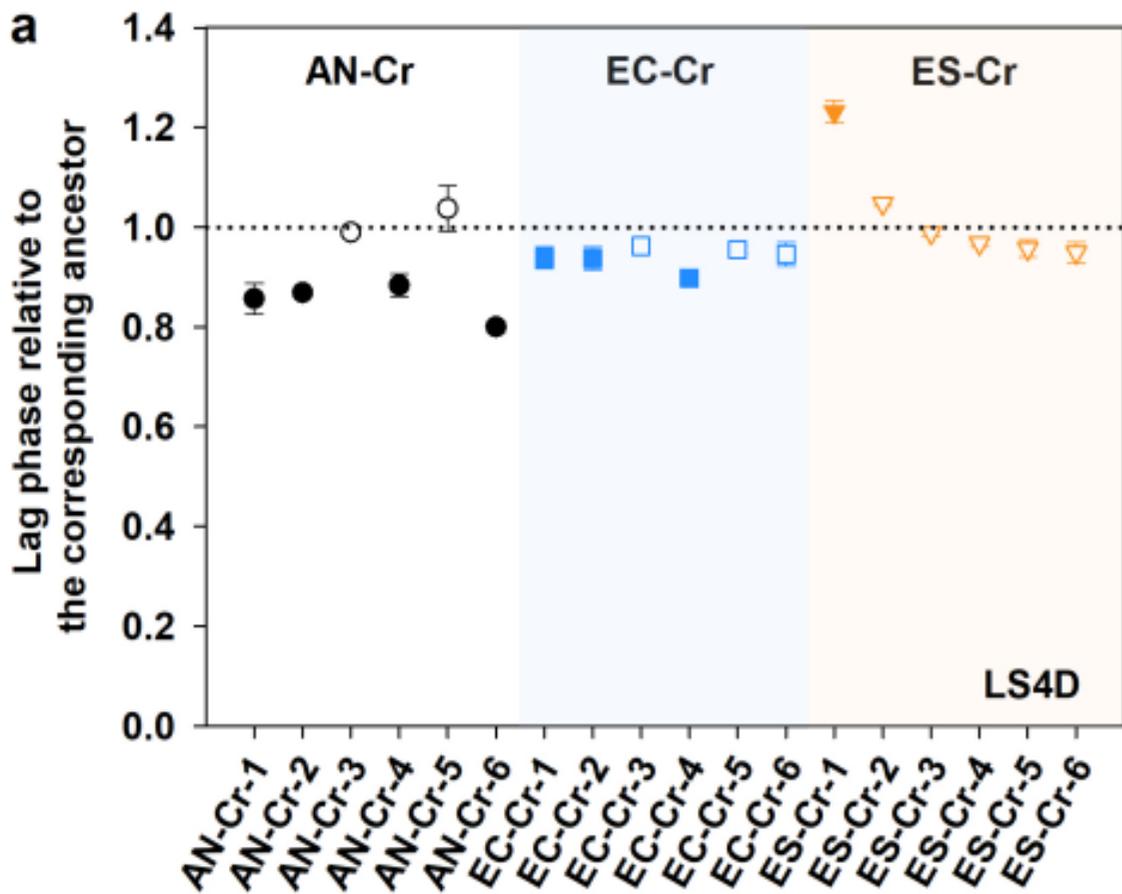


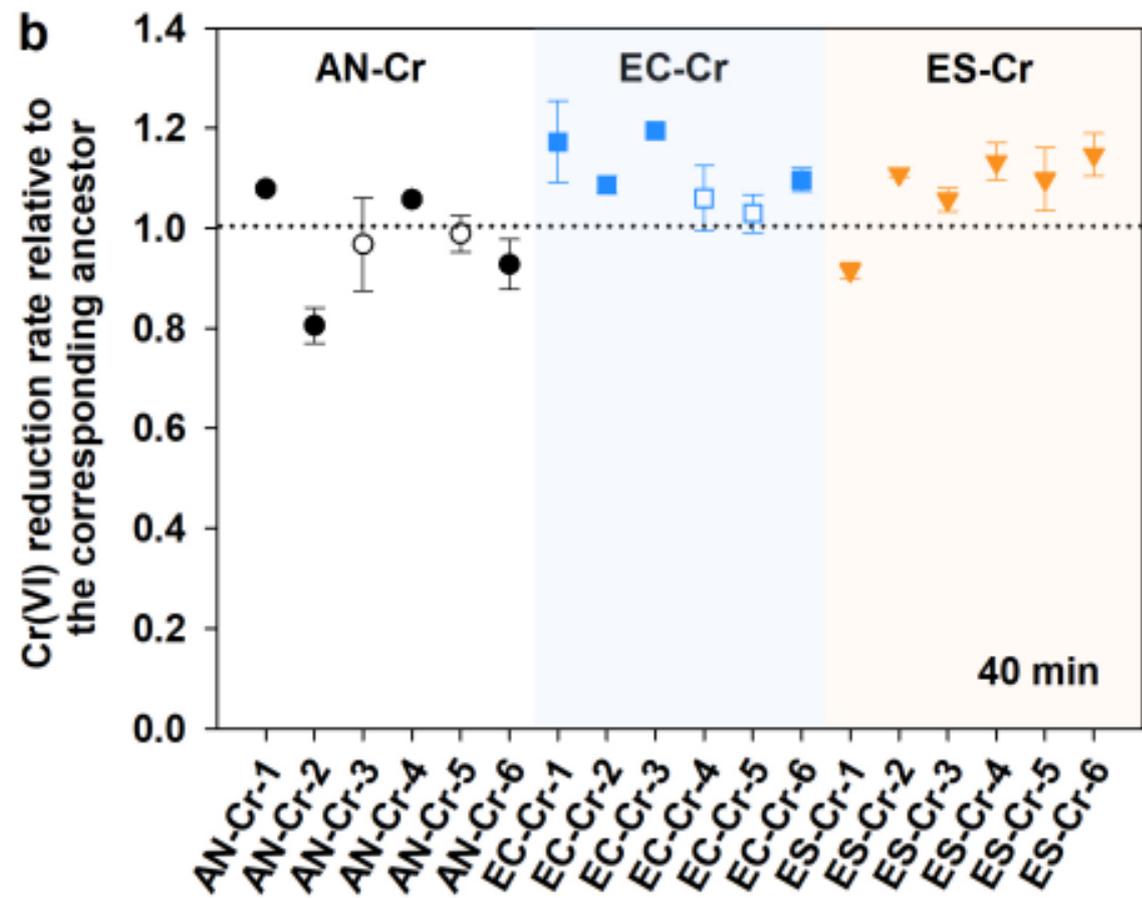
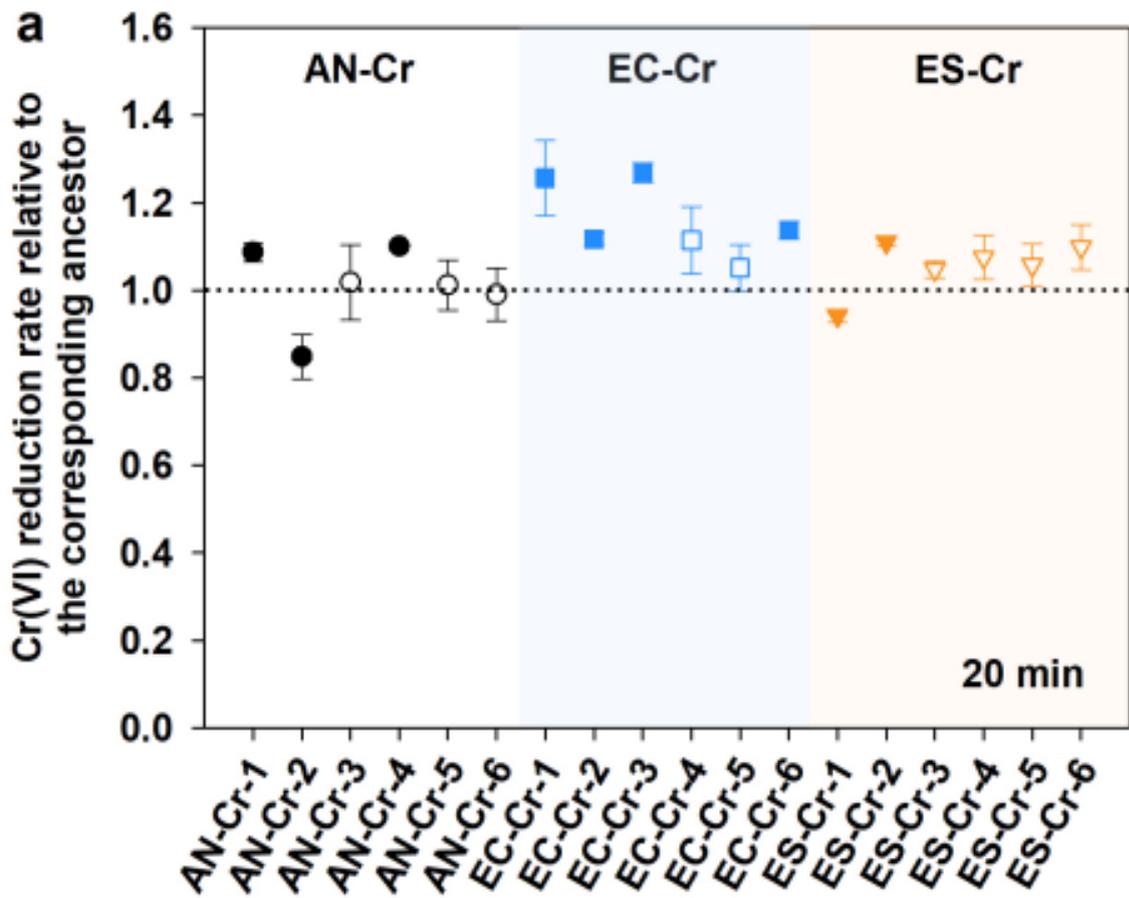
Evolved trait value under Cr(VI) stress

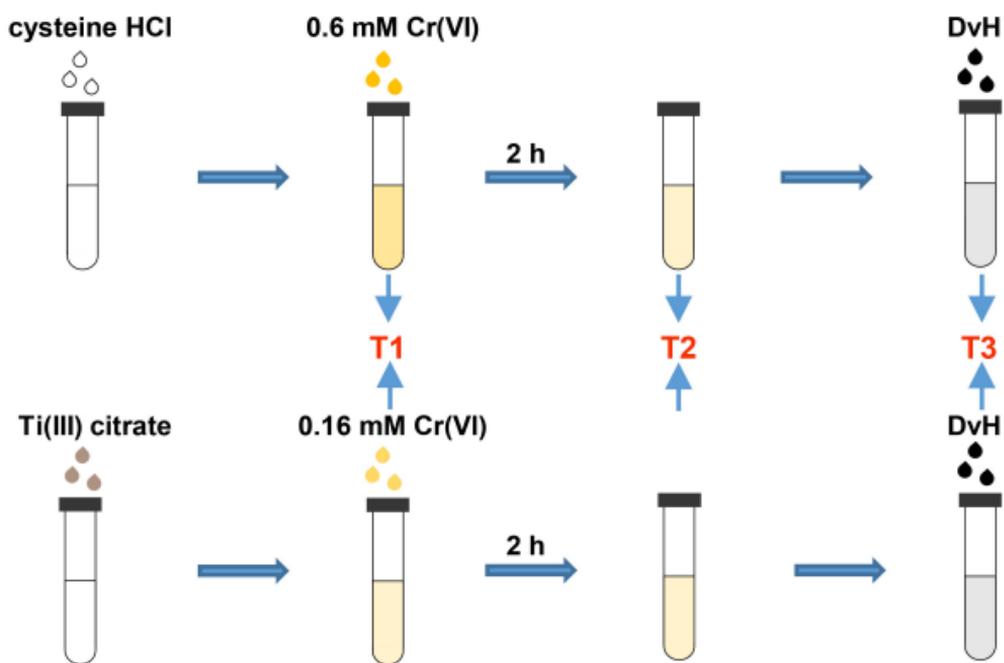


Ancestral trait value under Cr(VI) stress









	Cr(VI) concentration (mM)	
	Reductant: cysteine HCl	Reductant: Ti(III) citrate
Start	0.600±0.000	0.160±0.000
T1	0.330±0.014	0.126±0.002
T2	0.146±0.015	0.121±0.005
T3	0.026±0.015	0.027±0.005

**TABLE S2** PCR primers used for generation of the site-directed mutants and the in-frame deletion mutant

Name	Sequence (5'-3')	Description
LMD1	gccttttgctgccttttgctcacatATGGCTCGATGAAAAATCGT	amplification of upstream fragment of LMD SNP
LMD2	GCGACAAGATATTCGGCACCAAGTAAGGATGGGGCCGGGAGTTACCT	
LMD3	GCGCCCCAGCTGGCAATTCGGTCATGGCATCGGCCTTCAT	amplification of downstream fragment of LMD SNP
LMD4	gtCGAGGCATTTCTGTCCTGGCTGGTTGATATCGACCCCATAGGC	
LMD5	ATGAAGGCCGATGCCATGAGATGGGGCCGGGAGTTACCT	amplification of fragment containing LMD SNP
LMD6	AGGTAACCTCCCGGCCCATCTCATGGCATCGGCCTTCAT	
SMD1	gccttttgctgccttttgctcacatACCTCGTACCGCAGCACTC	amplification of upstream fragment of SMD SNP
SMD2	GCGACAAGATATTCGGCACCAAGTAAGGGGGGGCGGTGGTGGCGTCAT	
SMD3	GCGCCCCAGCTGGCAATTCGGGGCCATGCGGCCTGTTCTC	amplification of downstream fragment of SMD SNP
SMD4	gtCGAGGCATTTCTGTCCTGGCTGGTAGCTCATAACAGCCGTGGTG	
SMD5	AACAGGGCCGATGCCCGGGGGCGGTGGTGGCGTCAT	amplification of fragment containing SMD SNP
SMD6	ATGACGCACCACACCGCCCCCGCCATGCGGCCTGTT	
MD1	gccttttgctgccttttgctcacatATGAAGCACCGCATATCCTC	amplification of upstream fragment of MD SNP
MD2	GCGACAAGATATTCGGCACCAAGTAAGGTTCTTCCATCCTTCTGCGAA	
MD3	GCGCCCCAGCTGGCAATTCGGCCTGCATCGGCAGGGTCTTGCA	amplification of downstream fragment of MD SNP
MD4	gtCGAGGCATTTCTGTCCTGGCTGGTACATCGAGATGCAGGCTGA	
MD5	ACCCTGCCGATGCAGGGTTCTTCCATCCTTCTGCGAA	amplification of fragment containing MD SNP
MD6	AGAAGGATGGAAGAACCCTGCATCGGCAGGGTCTTGCA	