

### Supplementary file 3 – List of oligonucleotides used in this study\*

Primer ID	Name	Sequence
FW239	Sso TFE $\alpha$ NdeI fw	GGCATATGGTTAACGCAGAGGATCTGTTTATC
FW240	Sso TFE $\alpha$ stp EcoRI rv	GGGAATTCCTCAATGATTTTTATTAGCTCCAAG
FW242	Sso TFE $\beta$ RBS EcoRI fw	GGGAATTCAGGAGGTAATFAAATATGGAATCAGATTCAACAAGTAATTATGAAGC
FW279	Sso TFE $\beta$ XhoI rv	GGCTCGAGAGATAAAGCTTTTTCTATGATCCAGC
FW280	Sso TFE $\beta$ NcoI fw	CCCCCATGGAATCAGATTCAACAAGTAATT
FW281	Sso TFE $\beta$ BamHI rv	GGCGGATCCAGATAAAGCTTTTTCTATGATCCAGC
FW282	<i>Saci_1342</i> upstream flank NcoI fw	CCATGGAAGAACAGGTTCTCTCTAACAGC
FW283	<i>Saci_1342</i> upstream flank rv	CAC TAGTTAAGATATTTTCCCATTATTACTTTATTTC
FW284	<i>Saci_1342</i> downstream flank fw	AAATAAATGGGAAATATCTTAAGTAGTGTCTGCTGGATAAC
FW285	<i>Saci_1342</i> downstream flank BamHI rv	GGATCCACGTTGCTATAACTGCTACAGATCTT
FW322	Sso TFE $\alpha$ K46E fw	CAGTTGAATATAGAAGTTAATGATGTAAGGAAG
FW323	Sso TFE $\alpha$ K46E rv	CTTACATCATTAACCTCTATATTCAACTGATTCGC
FW324	Sso TFE $\alpha$ R51E/K52E fw	GTTAATGATGTAGAGGAGAAATTAATTTACTAGAGGAG
FW325	Sso TFE $\alpha$ R51E/K52E rv	GTAATTTAATTTCTCTCTACATCATTAACTTTTATATCAAC
FW326	<i>Saci_1162</i> upstream flank PstI fw	GGCCGGCTGCAGATATTATGACATTTGTTCAGGAGC
FW327	<i>Saci_1162</i> upstream flank rv	ATGCTCAAACCTATAGGACTACTTTTCATAAATAAAAATAGATATTCAA
FW328	<i>Saci_1342</i> promoter fw	GAAAGTAGCTCTATAGTTTGAGCATAACAGAAGTAACAATAAG
FW329	<i>Saci_1342</i> rv	TAAATTATGCTATCCAGCAGAAACACTAGTTAAGATAT
FW330	<i>Saci_1162</i> downstream flank fw	TCTGCTGGATAGCATAATTTATAACTAAAAATAAGGTAAAAA
FW331	<i>Saci_1162</i> downstream flank BamHI rv	GCGCGCGATCCGATGTGGATGACAAAGAGCACT
FW333	Sso TFE $\alpha$ $\Delta$ 111-178 stp EcoRI rv	GCGGAATTCCTCATTTCTCATATTCCAATCTTGTC
FW334	Sso TFE $\alpha$ D49T fw	GAATATAAAAGTTAATACGGTAAGGAAGAAATTAATTTACT
FW335	Sso TFE $\alpha$ D49T rv	TAATTTCTTCTTACCAGTATAACTTTTATATTTCAACTGAT
FW336	pET21a+ AvrII rv	GGCGCCTAGGCAGCTTCTTTTCGGGCTT
FW337	Sso TFB NdeI fw	GGCGCATATGTTGTATTTGTCTGAAGAAAATAAATCC

FW338	Sso TFB XhoI rv	GCGGCTCGAGTTGAGTAGGTATTGATATTTTTAGCTCTTG
FW340	Sso TBP stp XhoI rv	GCGGCTCGAGTTAGAGCTCTAACTCTTCCTCTTCCTC
FW345	Sso TFE $\alpha$ $\Delta$ 46-52 fw	GGCGGTGGCGGTAAATTAATTTACTAGAGGAGCAAGGT
FW346	Sso TFE $\alpha$ $\Delta$ 46-52 rv	TATATTCAACTGATTCGCTATTTCTTC
FW347	Sso TFE $\beta$ $\Delta$ 74-125 XhoI rv	GCGGCTCGAGATCAACAGCAAATAGTTTTACTATATTTTT
FW349	Sso TFE $\beta$ $\Delta$ 85-125 XhoI rv	GCGGCTCGAGAAGATTTATATAAATGTTTATATTATAATTATTATCAACA
FW387	Sso TFE $\alpha$ $\Delta$ 1-110 NdeI fw	GGCGCATATGAATAATACGTTCTTTATATGCCCTCAA
FW388	Sso TFE $\alpha$ $\Delta$ 148-178 stp EcoRI rv	GCGGGAATTCCTCAATCATAATAGGTTAGTTGCGATCCA
FW391	Sso TFE $\beta$ $\Delta$ 115-125XhoIrv	GCGGCTCGAGTTTACTGCAAGTTTGTGGACTTACA
FW396	Sso TFE $\beta$ $\Delta$ 1-73 BspHI fw	GGCGTCATGAATAATTATAATATAAACATTTATATAAATCTTAATGGTT
FW397	Sso TFE $\beta$ $\Delta$ 1-84 BspHI fw	GGCGTCATGAATGGTTTAGATGAAATTCCTTGC
FW436	Sso Rpo2 1055-1117 rv	TCCTTTTATATTCTTACCGCCATCTCCAAAACCTAACCTAGGTGAG
FW437	Sso Rpo1' 4-315 fw	TTAGTTTTGGAGGATGGCGGTAAGAATATAAAAGGAATAAAGTTTGGAAAT
FW438	Sso Rpo1' 4-315 rv	ACCCGCGCGCTGCCGCGCCACCAGATAAATTACCTCTAAATCTACCTTC
FW439	Sso Rpo1" 340-377 fw	GGCGCGGGCAGCGGCGGGTAGCGGTAGTGTATTAG CAAGAGCT
FW440	Sso Rpo1" 340-377 XhoI rv	GCCGCTCGAGATGACCAATTATAATGTTTTCTACTACACCT
FW443	Sso TFE $\beta$ C112S fw	GTAAGTCCACAAACTTCCAGTAAATTATCCGGCTGGAT
FW444	Sso TFE $\beta$ C112S rv	GCCGATAATTTACTGGAAGTTTGTGGACTTACATGTAT
FW447	Sso TFE $\beta$ C101S fw	GTAAAAGCTTAACCAAATCTGGAATGGAATACATGTAAG
FW448	Sso TFE $\beta$ C101S rv	GTATTCATTTCCAGATTTGGTTAAGCTTTTACAACCT
FW449	Sso TBP NdeI fw	GGCGCATATGTCCAATTCAGCGGTATCGTAT
FW566	hC39 RBS EcoRI fw	GGCGAATTCAGGAGGTAATTAATATGGCAGAAGTAAAAGTAAAAGT
FW567	hC39 stp XhoI rv	GCGCTCGAGTTAAAATCCAGCCATTCGG
FW569	hC62 N-His NdeI fw	GCGCATATGGCACACCATCACCCAC
FW570	hC62 stp EcoRI rev	GGCGAATTCCTTATTGGCGTTTCATCGTACA
FW642	Promoter SSV1 T6 C-less fw	GATTGATAGAGTAAAGTTTAAATACTTATATAGATAGAGTATAGATAGAGGGTATG GAAGGAGAAATAAATTGAG
FW643	C-less cassette rv	TCATTCACTCTCATCCCCTCTT
FW665	Sso TFE $\alpha$ $\Delta$ 114-147 fw	GGCGGTGGCGGTACGGATAAAATTAAGTCCTTCTT
FW666	Sso TFE $\alpha$ $\Delta$ 114-147 rv	CGTATTATTTTTCTCATATCCAA
FW667	Sso TFE $\alpha$ C117S fw	AATACGTTCTTTATAAGCCCTCAAGATAATAGTAGA
FW668	Sso TFE $\alpha$ C117S rv	ATCTTGAGGGCTTATAAAGAACGTATTATTTTTCTCA
FW669	Sso TFE $\beta$ K64E fw	GTTTTACTATATTTCCCCATTTTCTTCACTGC
FW670	Sso TFE $\beta$ K64E rv	GAAAGAAAATGGGGAAAATATAGTAAACTATTTGCTGT

FW671	Sso TFEβ K56E/K57E fw	GAAGAACTAATTATTGAAGAAGCAGTGAAGAAAATGGG
FW672	Sso TFEβ K56E/K57E rv	CTTTCACCTGCTTCTTCAATAATTAGTTTCTCTCGACT
FW673	Sso Rpo2 BspHI 1055-1117 fw	GGCCTCATGAGGACAATGATTTACGTTTGTGATC
FW683	<i>Saci_1342</i> upstream detection fw	GCGCATCTGTAGACGATGAA
FW684	<i>Saci_1342</i> downstream detection rv	GTGCAGCGAAATCAAAACAA
FW749	Promoter EF-1α C-less fw	CTTAAGTTCAAGGTAAACTTTTATTAACTCTATCACTATATCGGTTAAGAGAGATG GAAGGAGAATATAATTGAG
FW750	Promoter tRNA <sup>Leu</sup> C-less fw	ATTTTGTGGAAAAACATATAAGGTAAACTGAACTCAGTATAATAGATTGATGG AAGGAGAATATAATTGAG
FW733	Sso TFEβ C92S fw	GATGAAATTCCTTCCTTAAGTTGTAAAAGCTTAACC
FW734	Sso TFEβ C92S rv	CTTTTACAACCTAAGGAAGGAATTCATCTAAACCA
FW735	Sso TFEβ C95S rv	GGTTAAGCTTTTAGAACTTAAGCAAGGAATTTCA
FW736	Sso TFEβ C95S fw	CCCTTGCTTAAGTTCTAAAAGCTTAACCAAATGTG
FW917	Promoter Rpo5 C-less fw	AGTAAGTCAGAGTAAACTCTTATTAAACCAAATGTAGTATGTGAATAATGGTTAAT AATGAGAGGATATGGAAGGAGAATATAATTGAG
FW918	Promoter 16S/23S rRNA C- less fw	ATATAGAAGTTAGATTTATATGGGATTTTCAGAACAATATGTATAATGGGGATTATG GAAGGAGAATATAATTGAG
FW925	Promoter SSB C-less fw	TTCATTAACACATAGATTTATAAATGGATAAAATGATATTTGAAATAAGAAATGTG AGATTGAAAGAGGGGAGGAAG
FW969	Promoter hybrid rRNA/ EF- 1α C-less fw	ATATAGAAGTTAGATTTATATGGGATTTTCAGAACACTATATCGGTTAAGAGAGATG GAAGGAGAATATAATTGAG
FW971	Promoter rRNA/tRNA <sup>Leu</sup> C- less fw	ATATAGAAGTTAGATTTATATGGGATTTTCAGAACACTCAGTATAATAGATTGATGG AAGGAGAATATAATTGAG
509	Sso <i>rpoG</i> NcoI fw	<u>CCCCCATGGTGGAA</u> TCAGTGGCACAAG
510	Sso <i>rpoG</i> BamHI rv	<u>CCCCCGGATCCAT</u> TGTTTTTCTTCACGC

\*restriction sites are underlined and ribosome-binding sites are depicted in bold.