

S6 Table. Oligonucleotides used in this study.

Primer	Sequence	Purpose
PrimJ_NotI_fwd	ATATGCGGCCGCTGAACGACATATTGTCCTCGCTGA	
SMc00074_1243_Van91I_rev	ATATCCAGCGCCTGGCGCTCGAGAT	
RimJ_51_stop_fwd	TGACATTATCTGCTCCGCCTCCC	
RimJ_51_stop_rev2	GGGAGGCGGAGCAGATAATGTCACCTGGCTGGCGATCTCGAC	
EGFP-Van91I-KpnI_fwd	ATATCCAGGCGCTGGCGCTGGGTACCAGCAAGGGCGAGGAGC TGTT	
EGFP-ScaI_rev	ATATAGTACTTTACTTTGTACAGCTCGTCCATGC	
EGFP-Van91I-Stop-KpnI_fwd	ATATCCAGGCGCTGGCGCTGTGAGGTACCAGCAAGGGCGAGG AGCTGTT	Construction of pABC- <i>rgsP</i> and its derivatives
SMc00074_1243_Van91I_fwd	ATATCCAGGCGCTGGCGCTCAC	
SMc00074+stop_KpnI_rev	ATATGGTACCTCAAGCCCCTTCATCAGCGGAAAT	
SMc00074-nostop_KpnI_rev	ATATGGTACCAGCCCCTTCATCAGCGGAAAT	
SMc00074GGDEF+stop_KpnI_rev	ATATGGTACCTCATTTCGAGCTGTAGGCGGTCC	
SMc00074GGDEF- nostop_KpnI_rev	ATATGGTACCTTCGAGCTGTAGGCGGTCC	
SMc00074PAS+stop_KpnI_rev	ATATGGTACCTCACAGAAGCGCGTTGTGCAA	
SMc00074PAS-nostop_KpnI_rev	ATATGGTACCCAGAAGCGCGTTGTGCAA	
SMc00074-full_-100_Bam_f	ATATGGATCCTGAGCGTGAAGGCTATTTGAGA	
SMc00074-full-Xba_r	ATATTCTAGATCAAGCCCCTTCATCAG	
SMc00074_EAL-del_Xba_r	ATATTCTAGATCATTTCGAGCTGTAGGCGGT	Construction of pR- <i>rgsP</i> and its derivatives
SMc00074_GGDEF-EAL-del_Xba_r	ATATTCTAGATCACAGAAGCGCGTTGTG	
SMc00074_PAS-GGDEF-EAL- del_Xba_r	ATATTCTAGATCAGGTATCGCCTGATCCC	
SMc00074_E>A-f	GCGGCCCTCATGCGCTGGGA	Generating <i>rgsP</i> _{AAL}
SMc00074_E>A-r	AGCGCATGAGGGCCGCAAGCCGGCGATCTCGGCAT	
SMc00074_GGDQF>GAAAF_f	GCCGCGCCTTCGGCTTGATCCTCATGT	Generating <i>rgsP</i> _{GAAAF}
SMc00074_GGDQF>GAAAF_r	AGGATCAAGCCGAAGCCGCGGCCAAGACGCGGAGCGT	
SMc00074_Isite>AxxA_f	GCCCCGAGGCCACGCTCGCGCTCTTGGC	Generating <i>rgsP</i> _{AxxA}
SMc00074_Isite>AxxA_r	ACGCGGAGCGTGGCCTGCGGGCCAGAAGCCTGCGCAGGCG	
SMc00074_GGDEF-del_f	GAGCCGTTCCGTCGGCTTT	Generating <i>rgsP</i> _{AGGDEF}
SMc00074_GGDEF-del_r	GACGGAACGGCTCCAGAAGCGCGTTGTGCAA	
SMc00074_PAS-del_f	ACCGAACAGCGCAATTCG	Generating <i>rgsP</i> _{ΔPAS}
SMc00074_PAS-del_r	TGCGTGTTCCGGTGTATCGCCTGATCCCCTGA	
SMc00074_DISMED2-del_f	GACGCTACAAGGATACCGT	Generating <i>rgsP</i> _{Δ7TMR-DISMED2}
SMc00074_DISMED2-del_r	TCCTTGTAGGCGTCCGCGGTGTCTCGCGCGA	
SMc00074_DISM-6TM-del_f	ACCGGTCAACTCGCCAAT	Generating <i>rgsP</i> _{Δ7TMR-DISMED2Δ7TMR-DISM_7TM}
SMc00074_DISM-6TM-del_r	CGAGTTGACCGGTGCGCGGTGTCTCGCGCGA	
SMc02432_H510A_fwd	GCCACCGCGCTGACTGGTCC	Generating <i>rgsM</i> _{H510A}
SMc02432_H510A_rev	GACCAGTCGACCGCGTGGCCATGCGCGAGAAGCCGAGGATA	
SMc00074-390_Bam_fwd	ATATGGATCCACCGTCATGACGACGCGCTTTT	Construction of pWH844-RgsP _{PAS-GGDEF-EAL-AAL} and pWH844-RgsP _{PAS-GGDEF}
SMc00074_Sal_rev	ATATGTCGACTCAAGCCCCTTCATCAG	
SMc00074-715_Sal_rev	ATATGTCGACTCATTTCGAGCTGTAGGCGGTCC	
SMc00074-38_Bam_fwd	ATATGGATCCGAGCCGTTGAAGATCTCG	Construction of pWH844- <i>rgsP</i> _{7TMR-DISMED2}
SMc00074-194_+stop_Sall_rev	ATATGTCGACTCAGGTGAAGCGTTGACGGTAT	

SMc02432_57_Xho_fwd	ATATCTCGAGCTCGACGGCCGGCAGCAACT	Construction of pWH844- <i>rgsM</i> ⁵⁷⁻⁶⁴⁶
SMc02432_Pst_rev	ATATCTGCAGCTACTTGCTTGCACCTCGTT	
SMc02432+778-BglII-f	ATATAGATCTAAGCAGAGCATCGAATACGCC	Construction of pWH844- <i>rgsM</i> ²⁶⁰⁻⁶⁴⁶
SMc02432-stop-Pst	TTGCCTGCAGCTACTTGCTTGCACCTCGTT	
SMc02432-full-Xba-f	ATATTCTAGAATGAGCAGCGATAAGAACATGC	Construction of pWBT- <i>rgsM</i> and pWBT- <i>rgsM</i> _{H510A}
SMc02432-full-Kpn-r	ATATGGTACCCTACTTGCTTGCACCTCGTT	
SMc00074-TIR-RBS_Bam_f	ATATGGATCCTGATTAACCTTTATAAGGAGGAAAAACATATGC CCCTGACCCGTAAGC	Construction of pR-P _{tau-<i>rgsP</i>} _{Sm}
SMc00074-full-Xba_r	ATATTCTAGATCAAGCCCGCTTCATCAG	
RHE_CH00976-TIR-RBS_Bam_f	ATATGGATCCTGATTAACCTTTATAAGGAGGAAAAACATATGC TGCCCAAGTCACCGT	Construction of pR-P _{tau-<i>rgsP</i>} _{Re}
RHE_CH00976-full_Xba_r	ATATTCTAGATCAGGCCCTTTTCGTCAGCG	
Atu0784-TIR-RBS_Bam_f	ATATGGATCCTGATTAACCTTTATAAGGAGGAAAAACATATGA CCTACAATCACACTGCGCC	Construction of pR-P _{tau-<i>rgsP</i>} _{At}
Atu0784-full_Xba_r	ATATTCTAGATCAAGACGCCCGCTTCGT	
SMc02432-full-Xba-f	ATATTCTAGAATGAGCAGCGATAAGAACATGC	Construction of pR-P _{tau-<i>rgsM</i>} _{Sm}
SMc02432-full-X-r	ATATTCTAGACTACTTGCTTGCACCTCGTT	
RHE_CH03752-TIR-RBS_Xba_f	ATATTCTAGATGATTAACCTTTATAAGGAGGAAAAACATATGA TCCGCTCGCTGGGCAA	Construction of pR-P _{tau-<i>rgsM</i>} _{Re}
RHE_CH03752-full_Xba_r	ATATTCTAGATTATTTGCTCGCCACCTGATCG	
Atu4178-TIR-RBS_Bam_f	ATATGGATCCTGATTAACCTTTATAAGGAGGAAAAACATATGA CTGCGGATCGCAATGT	Construction of pR-P _{tau-<i>rgsM</i>} _{At}
Atu4178-full_Xba_r	ATATTCTAGATCAGCGGCTCGCCACCTGAT	
Psmc00074_Hind_fwd	ATATAAGCTTCGGCGCTGCGCAGAACTG	Construction of pSRKKm-P _{rgsP} - <i>egfp</i> and pSRKKm-P _{rimj} -P _{rgsP} - <i>egfp</i>
Psmc00074_Xba_rev	ATATTCTAGACAGGGGCATCAAAGGGGCAAAT	
PrimJ_Hind_fwd	ATATAAGCTTTGAACGACATATTGCTCCTCGCTGA	
SMc00074-C-Sall_fwd	ATATGTCGACTTTCCTCGTATACCAGCCCA	Construction of pK18mob2- <i>rgsP</i> - <i>egfp</i>
SMc00074-C-XbaI_rev	ATATTCTAGAAGCCCGCTTCATCAGCGGAA	
RHE_CH00976-C_Hind_f	ATATAAGCTTCAGCTCGAAACCGATCTGCG	Construction of pK18mob2- <i>rgsP</i> _{Re} - <i>egfp</i>
RHE_CH00976-C_Xba_r	ATATTCTAGAGCCCTTTTCGTCAGCGGAAA	
Atu0784-C_Sal_f	ATATGTCGACGCAAGGAGCTGTCCCTCGCCTAT	Construction of pK18mob2- <i>rgsP</i> _{At} - <i>egfp</i>
Atu0784-C_Xba_r	ATATTCTAGAAGACGCCCGCTTCGTGCG	
SMc00074-C-KpnI_fwd	ATATGGTACCTTTCCTCGTATACCAGCCCA	Construction of pG18mob- <i>rgsP</i> -3× <i>flag</i>
SMc00074-C-XbaI_rev	ATATTCTAGAAGCCCGCTTCATCAGCGGAA	
SMc02432-C717-EcoRI-f	ATATGAATTCTTGGAAGCAATGTGCGACTT	Construction of pG18mob- <i>rgsM</i> -3× <i>flag</i>
SMc02432-C738-XbaI-f	ATATTCTAGACTTGCTTGCACCTCGTT	
SMc00074-C-Sall_fwd	ATATGTCGACTTTCCTCGTATACCAGCCCA	Construction of pK18mobsacB- <i>rgsP</i> - <i>egfp</i> , pK18mobsacB- <i>rgsP</i> - <i>mCherry</i> and pK18mobsacB- <i>rgsP</i> -3× <i>flag</i>
mCh/egfp-Kpn-r	GTACGGTACCTTACTTGTACAGCTCGTCCATG	
SMc00074-763-r-K_f	ATATGGTACCGGCATCTGCCCGTFCAG	
SMc00074-763-r-S_r	ATATCCCGGGATGGCGAAAAACGTGCTG	
SMc02432-326-HindIII_fwd	ATATAAGCTTGCAGGAGATCTCGATGCG	Construction of pK19mob2ΩHMB- <i>rgsM</i>
SMc02432-326-PstI_rev	ATATCTGCAGACGTCTGATGGTTGGCGG	
PT5-BamH-f	ATATGGATCCCATATGCTTTCGTCTTCACCTC	Construction of pK18mob2-P _{lac-T5} - <i>rgsP</i> (pWBT- <i>SMc00074</i> used as PCR template)
SMc00074-N584-Hind_r	ATATAAGCTTACAGGGTGAAGGCGTTGA	
PhoAEc+79-f-Xba	GTGTTCTAGACCTGTTCTGGAAAACCGGG	Construction of pSRKKm- <i>rgsM</i> - <i>phoA</i> ,
PhoAEcstop-r-Kpn	TTCGGGTACCTTATTTTCAGCCCGAGCGGC	

SMc02432-full-N-f	ATATCATATGAGCAGCGATAAGAACATGC	pSRKKm- <i>rgsM</i> ₁₋₆₆ - <i>phoA</i> and
SMc02432-C738-XbaI-f	ATATTCTAGACTTGCTTGCGACCTCGTT	pSRKKm- <i>rgsM</i> ₆₀₋₆₄₆ - <i>phoA</i>
SMc02432+198-r-Xba	GCCTCTAGACGGAATCGCCAGTTGCTGCCG	
SMc02432+178-f-Nde	GCCTCATATGCGGCAGCAACTGGCGATTCCG	
EGFP/mCh-f-Nde	GAGTCATATGGTGAGCAAGGGCGAG	
EGFP/mCh-Xba-r-nostop	GTA CTCTAGACTTG TACAGCTCGTCCATG	
mVenus_Kpn_fwd	ATATGGTACCATGGTGAGCAAGGGCGAGGAG	
SMc02432_-start_Xba_fwd	ATATTCTAGAAGCAGCGATAAGAACATGCTTC	
SMc02432_+750_Hind_rev	ATATAAGCTTTCATGTTCTCTCGACGACGC	Construction of
SMc02432-768-l-B_f	ATATGGATCCCCTCGACTTGCATGTGTAA	pSRKGm- <i>mCherry</i> ,
SMc02432-768-l-K_r	ATATGGTACCCTTTATCGCTGCATGCAGG	pSRKGm- <i>mCherry-ftsZ</i> ,
SMc02432-774-r-K_f	ATATGGTACCCACACAGCAACGGTATCG	pK18mobsacB- <i>mVenus-rgsM</i> and
SMc02432-774-r-S_r	ATATCCGGGAGTACATGGAGAAGCATTCGGT	pK18mobsacB- <i>rgsM-3×flag</i>
FtsZ+1-Xba-f	GAATCTAGAATGGCCATCAACTTGCAGAAG	
FtsZ-end-Hind-r	CGCGAAGCTTTCAGCTCGACTGGCGGCGC	
N-Flag-mucR-XbaI_fwd	ATATTCTAGAACAGAGACTTCGCTCGGTACG	
N-Flag-mucR-HindIII_rev	ATATAAGCTTTCACTTGCCGCGACGCTT	Construction of
N-FLAG-mucR-454-left-EcoRI_fwd	ATATGAATTCATCCGTGATAGATCAGCTTCCC	pK18mobsacB- <i>3×flag-mucR</i>
N-FLAG-mucR-454-left-NdeI_rev	ATATCATATGTTCTTTCTCTATCGGAATCCAG	
3xFLAG_Kpn-blnt_oligo1	CGATTACAAGGATCACGATGGTGATTACAAGGATCACGATAT	Construction of
3xFLAG_Kpn-blnt_oligo2	CGATTACAAGGATGACGATGACAAGTGA	pABC- <i>rgsP-3×flag</i> ,
FLAG_KpnI_rev	TCACTTGTCATCGTCATCCTTGTAAATCGATATCGTGATCCTTG	pR- <i>rgsP-3×flag</i> ,
SMc02432-C738-KpnI-r	TAATCACCATCGTGATCCTTGTAAATCGGTAC	pWBT- <i>rgsM-3×flag</i> ,
pUT18-Spe-f	ATATGGTACCTCACTTGTATCGTCATCCTTGTA	pK18mobsacB- <i>rgsP-3×flag</i> ,
pUT18-Spe-r	ATATGGTACCCTTGCTTGCGACCTCGTT	pK18mobsacB- <i>rgsM-3×flag</i> and
SMc00074-XbaI_fwd	GAACACTAGTATGACCATGATTACGCCAAG	their derivatives
SMc02432+1575-Kpn-+2-r	CCTAACTAGTTTCTGTGTGAAATTGTTATCC	Construction of
SMc02432+3-Xba-f	ATATTCTAGAATGCCCTGACCCGTAAG	pUT18Spe,
SMc02432-end-r-Kpn	TATAGGTACCGTGATGTCGTTGATGGTCCCG	pUT18Spe- <i>rgsP</i> _{ΔGGDEFΔEAL} ,
SMc00074-seq-550	TTCTCTAGAGAGCAGCGATAAGAACATGCTT	pUT18C- <i>rgsM</i> and
SMc00074-seq-1146	ATATGGTACCCTACTTGCTTGCGACCTCGTT	pKT25- <i>rgsM</i>
SMc00074-seq-1780	ACGCCTACAAGGATAACCGTCA	
SMc02432_679	ATCGTGCTCCTGATCGGC	
RHE_CH00976_seq-395	ACAATGTCCTCATCGCGCT	
RHE_CH00976_seq-1141	TTCTATGTCGACCCGCAAC	
RHE_CH03752_seq-361	GAGCGAAGGCTTTGCGCT	
Atu0784_seq-388	CTGATCGGCTTACCCTCAT	
Atu0784_seq-1141	AAGATGAGGCTGGCCGCCAA	Sequencing
Atu4178_seq-371	CAGCGCATCATCGCCATCA	
PCR1	GTGCTGATCGTGCTGCTGAT	
PCR2	CTCACGTCAAGATTCGGCTG	
egfp_rev	CGGGCCTCTTCGCTATT	
	TTAGCTCACTCATTAGG	
	ACTTCAGGGTCAGCTTGCCGTA	

405	GATCCGGCAAACAAACCACC
456	CGCTCTCCTGAGTAGGACAAA
pQE_fwd	CGGATAACAATTCACACAG
pQE_rev	CAAGCTAGCTTGGATTCTCACC
T25-r	CCTCTTCGCTATTACGCCAGC
T18-r	CGGAGACGGTCACAGCTTGTC
T18_fwd	AAAGCCTGTTCGACGATGG
T25_fwd	TGACGGCGGATATCGACATGT
