

Table S1 Oligonucleotides used in this work. The restriction enzymes are underlined, optRBS is highlighted in red.

Primer name	Sequence 5' - 3'	Restriction enzyme
Bioluminescence reporter experiment		
Xhol-PfeoAB1 fw	GGG <u>CTCGAG</u> GTGCCGAGGGAAACATCTG	XhoI
NdeI-PfeoAB1 rev	CCCCATATGCCTGGAACCTCCTTATTTGTTAATG	NdeI
Xhol-Pmms6 fw	GGG <u>CTCGAG</u> ACCTGTCAATTCCTTCCTG	XhoI
NdeI-Pmms6 rev	GGGCATATGCAGAGTTCTCCTTAGCAATC	NdeI
Xhol-Pmms36 fw	GGG <u>CTCGAG</u> GGTTCGGCCTCGGGTGATTACG	XhoI
NdeI-Pmms36 rev	CCCCATATGTGGCTCCGCTTCCGCTAGCTGCGCGG	NdeI
Xhol-PmamG fw	GGA <u>CTCGAG</u> CAACTTTTTCGCTTACTAG	XhoI
NdeI-PmamG rev	CCCCATATGCTGATCTCCGGCAAGTG	NdeI
Xhol-PmamH fw	AA <u>CTCGAG</u> GGCATCCTGATCGGTAGGCG	XhoI
NdeI-PmamH rev	GGGCATATGTCCCGTCAACAATTCACCTCC	NdeI
Xhol-P(mamH) fw	GGG <u>CTCGAG</u> GTTCCAGATTGGTGGGTTTTATTTG	NdeI
NdeI-optRBS-P(mamH) rev	GGGCATATGCTGAT <u>TCTCCT</u> AAACGTTCTCCAGTCTTG	XhoI
NdeI-natRBS-P(mamH) rev	CCCCATATGAAACGTTCTCCAGTCTTGATACAG	NdeI
Xhol-P(mamE) for	GGG <u>CTCGAG</u> GTTTCGCCAATCCCACCACTC	NdeI
NdeI-optRBS-P(mamE) rev	CCCCATATGCTGAT <u>TCTCCT</u> CGTCTTTACGGTGACGTAC	NdeI
NdeI-natRBS-P(mamE) rev	CCCCATATGTATCCCGCTCCACCCTCAAAG	NdeI
Xhol-P(mamL1) for	GGG <u>CTCGAG</u> ATGGGGGATGCATTTTGGTTG	XhoI
NdeI-optRBS-P(mamL1) rev	GTT <u>CATATG</u> CTGAT <u>TCTCCT</u> GGCGTTGGACGATGCC	NdeI
P(mamL2) fw	TCGTTGGTGTTCGGCGGCTTGAT	-
optRBS-P(mamL2) rev	CTGAT <u>TCTCCT</u> TATGCTTGCGCCGTTTCATAAC	-
NdeI-natRBS-P(mamL2) rev	CCCCATATGCCTTACCTACTCCAAAGCC	NdeI
Xhol-P(mamO) fw	GGG <u>CTCGAG</u> CGGATCAGTCTGCAGAACGCC	XhoI
NdeI-optRBS-P(mamO) rev	CCCCATATGCTGAT <u>TCTCCT</u> TCCCGGCTAATCCCAAACC	NdeI
NdeI-natRBS-P(mamO) rev	CCCCATATGTCCCGGCTAATCCCAAACC	NdeI
Xhol-P(mamP) fw	GTT <u>CTCGAG</u> GCACCCCGGTCTTGCGC	XhoI
NdeI-optRBS-P(mamP) rev	CCCCATATGCTGAT <u>TCTCCT</u> AAATCCCAATCCGGTGGCTC	NdeI
NdeI-natRBS-P(mamP) rev	CCCCATATGACTGTTCTCCAAAATCCCAATCCG	NdeI
Xhol-P(mamA) fw	GGG <u>CTCGAG</u> GTGATAAATTAGCCAGAGCCACC	XhoI
NdeI-optRBS-P(mamA) rev	CCCCATATGCTGAT <u>TCTCCT</u> ATTCGCACCGAGCTTCTTC	NdeI
Xhol-P(mamQ) fw	GTGCTCGAGATGATGACCTCGCTGGTGGATATG	XhoI
NdeI-optRBS-P(mamQ) rev	CCCCATATGCTGAT <u>TCTCCT</u> AATGATCGGCGTGTCGC	NdeI
NdeI-natRBS-P(mamQ) rev	CCCCATATGTGCTGTCCAAATCAATTCTTGATTCC	NdeI
Xhol-PmamY fw	GGG <u>CTCGAG</u> GGCAGCCTCATTTAAAC	XhoI
NdeI-PmamY rev	CCCCATATGAAGGGCTGCTCCCGTGGTGGCTGTGG	NdeI
Xhol-PmamX fw	GGG <u>CTCGAG</u> CGAAAGCCGACGTCCGAAATTG	XhoI
NdeI-optRBS2-PmamX rev	CCCCATATGCTGAT <u>TCTCCT</u> GATCCAGACGGCGATGTC	NdeI
NdeI-natRBS-PmamX rev	CCCCATATGGATCCAGACGGCGATGTCGGGATGTG	NdeI
Control + string	GGG <u>CTCGAG</u> GAAAGAAGCTCGGTGCGACT <u>AGGAGA</u> TCAGCATATGGGG	XhoI, NdeI
Control - string	CCCCATATGCTGAT <u>TCTCCT</u> AGTTCGCACCGAGCTTCTCCTCGAGCCC	XhoI, NdeI
Promoter sequence substitution		
Pmms6_LHR fw	GCGATGGCCAGATACAGAACCAGGACCTG	-

Pmms6_LHR_PFS rev	GAATGGATGCGAGTAATGGTGCCTGCTCAGATCGCC	-
Pmms6_LHR_PFS fw	GGCGATCTGAGCAGGCACCATTACTCGCATCCATTC	-
Pmms6_PFS_RHR rev	TAGTGTTTTTAGCCCCATCGATTGAGGACCTTCAGTG	-
Pmms6_PFS_RHR fw	CACTGAAGGTCCTCAATCGATGGGGCTAAAAAACTA	-
Pmms6_RHR rev	GATGCAGCGCGAACATGGCCAGGATG	-
Pmms36_LHR fw	GCGACATGAAAATCAACAGGACGATCAGGCGT	-
Pmms36_LHR-PFS rev	GAATGGATGCGAGTAATGGGAAGCGGAGCCAATGG	-
Pmms36_LHR-PFS fw	CCATTGGCTCCGCTTCCCATTACTCGCATCCATTC	-
Pmms36_PFS-RHR rev	CATCAGCTGTTTCAGGACCGATTGAGGACCTTCAGTGC	-
Pmms36_PFS-RHR fw	GCACTGAAGGTCCTCAATCGGTCTGAAACAGCTGATG	-
Pmms36_RHR rev	CTTCGCTGTGTCCACAAGAACC GCGAC	-
PmamH_LHR fw	CCTTCAATTACGGTTTCCACGGTCTCGGC	-
PmamH_LHR_PFS rev	GAGAATGGATGCGAGTAATGTTAGCGCGCTAGCACATTTTC	-
PmamH_LHR_PFS fw	GAAATGTGCTAGCGCGCTAACATTACTCGCATCCATTCTC	-
PmamH_PFS_RHR rev	CAGGTTCCATTCCCGTCACCGATTGAGGAGCTTGAGTG	-
PmamH_PFS_RHR fw	CACTCAAGCTCCTCAATCGGTGACGGGAATGGAACCTG	-
PmamH_RHR rev	GCCGAGAACAGAACCGAGCAAGTCTTTTGGTGC	-
PmamY_LHR fw	CAAGGCCCACTCGCCATCCTCGAAG	-
PmamY_LHR-PFS rev	GAGAATGGATGCGAGTAATGGCCCTTATGTTGATGAAC	-
PmamY_LHR-PFS fw	GTTTCATCAACATAAGGGCCATTACTCGCATCCATTCTC	-
PmamY_PFS-RHR rev	CCTCACAACAAAAGGCGCGATTGAGGACCTTCAGTG	-
PmamY_PFS-RHR fw	CACTGAAGGTCCTCAATCGCCGCTTTTGTGTTGTGAGG	-
PmamY_RHR rev	CACTCCCTGCTGATTTCTGGGAATAGCTC	-
PmamX_LHR fw	CGAACCATCCCACGCAGACGATGGAG	-
PmamX_LHR-PFS rev	GAATGGATGCGAGTAATGTGAACACCAAAGCCGTTG	-
PmamX_LHR-PFS fw	CAACGGCTTTGGTGTTCACATTACTCGCATCCATTC	-
PmamX_PFS-RHR rev	GTCCAGACGGAAGGCCGACGATTGAGGACCTTCAG	-
PmamX_PFS-RHR fw	CTGAAGTCCTCAATCGTCGGCCTTCCGTCTGGAC	-
PmamX_RHR rev	GATCTTCATGCTCTCGCAGATTGTGAGAACCCTC	-
XhoI-Pmms6 fw	GAGCTCGAGACCTGTCAATTCCTCCCTG	XhoI
BamHI-mmsF rev	CACGGATCCTCAGATCCGGTCCGCCAC	BamHI
PacI-Pmms36 fw	GGGTTAATTAAGGTTCCGGCCTCGGGTGATTAC	PacI
BamHI-mms48 rev	CACGGATCCTCATGTACTGCGGAACAGTCCG	BamHI
XhoI-PmamH fw	GAGCTCGAGGTGTGCCACATTGCCAGG	XhoI
BamHI-mamH rev	CACGGATCCTTAGGCCACTTCGTCATC	BamHI
XhoI-PmamY fw	GGGCTCGAGATTATACTATTCCGAAATTAATAC	XhoI
SacI-mamY rev	GTTGAGCTCTCACGCATCGGAGATGG	SacI
XhoI-PmamX fw	GAACTCGAGCGAAAGCCGACGTCCGAAA	XhoI
SacI-ftsZ rev	GTTGAGCTCTCAGGCGATACCGGTGG	SacI