

Assignment of sigma factors of RNA polymerase to promoters in *Corynebacterium glutamicum*

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Submitted to AMB Express

Table S1 Oligonucleotide primers used

Primer	Sequence ^a	Use
PRSHAPEPRF	GTCCCGACTCCATCGTGGAAGAAAACAGCTCCG AGGAATGTTAAAGGAAGTAGCGAAGG	<i>PrshA</i> cloning in pEPR1
PRSHAPEPRR	GATCC CTTCGCTACTTCCTTTAACATTCTCGGAG CTGTTTTCTTCCACGATGGAGTCGGGACT GCA	<i>PrshA</i> cloning in pEPR1
TRXB1F ^b	GTCT GCA GATCAATATCCACACCCT	<i>PtrxB1</i> cloning in pEPR1
TRXB1R ^b	GCCGGAT CCT GTGCTCTCAAATGT	<i>PtrxB1</i> cloning in pEPR1
PSIGBHP ^b	CACT GCA GAAAGGTCACATCGGTT	<i>PsigB</i> cloning in pEPR1
PSIGBDB ^b	GTGGAT CCT GCTGTCATAACTGG	<i>PsigB</i> cloning in pEPR1
PCG2556F ^b	AACT GCA GAAATCTGGTTCAGGTATTC	<i>Pcg2556</i> cloning in pEPR1
PCG2556R ^b	AAGGGAT CCT TCTTGTTTGCTG	<i>Pcg2556</i> cloning in pEPR1
PCMT1PEPRF ^c	GTT CGAAAAGGTAAAGCGCCTGTTAACGTAATA GCTTGAAATATAGATGTAAATTAAAG	<i>Pcmt1</i> cloning in pEPR1
PCMT1PEPRR ^c	GATC CTTTAATTTACATCTATATTTCAAGCTATTA CGTTAACAGGCGCTTTACCTTTTCGA ACTGCA	<i>Pcmt1</i> cloning in pEPR1
PSIGAF ^b	ATCT GCA GAAAGCACGAAAAGTG	<i>P2sigA</i> cloning in pEPR1

PSIGAR ^b	GGTGGGATCCCCTGGAAAGTCTCAT	P2sigA cloning in pEPR1
PFBAPEPRF ^c	GAGGAAATATCACACGACAAAAGTTGAGTGATG CAGGCATAATTGGCTATAGGCAACTG	Pfba cloning in pEPR1
PFBAPEPRR ^c	GATCCAGTTGCCTATAGCCAATTATGCCTGCATC ACTCAACTTTTGTCTGTGATATTTCTCTGCA	Pfba cloning in pEPR1
PRSHAP770F ^c	AATTCTCCCGACTCCATCGTGGAAGAAAACAGCTCC GAGGAATGTAAAGGAAGTAGCGAAGA	PrshA cloning in pRLG770
PRSHAP770R ^c	AGCTTCTTCGCTACTTCCTTTAACATTCTCGGAGCT GTTTTCTTCCACGATGGAGTCGGGAG	PrshA cloning in pRLG770
TRXB1P770F ^c	AATTCAGAAAATCCTTGGCCGGGAATAACTACAGT CCGCTGAAAGTTGGTCTATATATAGACCA	PtxB1cloning in pRLG770
TRXB1P770R ^c	AGCTTGGTCTATATATAGACCAACTTTCAGCGGACT GTAGTTATTCCCGGCCAAGGATTTTCTG	PtxB1cloning in pRLG770
PSIGBCGF ^b	GGGAATTCAGAACTCCATAAAAAG	PsigB cloning in pRLG770
PSIGBCGR ^b	ATAAGCTTTACAAGAGGTTCAACGGAC	PsigB cloning in pRLG770
CG2556P770F ^c	AATTCACCAATTCTTTAAAGCTCTCACCTCTTTAGG GAACTGAATGCGGTCTGTACTCGACTACTGGATCAT GAA	Pcg2556 cloning in pRLG770
CG2556P770R ^c	AGCTTTCATGATCCAGTAGTCGAGTACAGACCGCAT TCAGTTCCCTAAAGAGGGTGAGAGCTTTAAAGAAT TGGTG	Pcg2556 cloning in pRLG770
PCMT1P770F ^c	AATTCGAAAAGGTAAAGCGCCTGTAAACGTAATAG CTTGAAATATAGATGTAAATTAA	Pcmt1cloning in pRLG770
PCMT1P770R ^c	AGCTTTAATTTACATCTATATTTCAAGCTATTACGTT AACAGGCGCTTTACCTTTTCG	Pcmt1cloning in pRLG770
PSIGAP770F ^b	ATGAATTCGAAAGGTGATTTTTTGCC	P2sigA cloning in pRLG770
PSIGAP770R ^b	TCCAAGCTTAGCGTTCCATTATAGTTGA	P2sigA cloning in pRLG770
PFBAP770F ^c	AATTCAGGAAATATCACACGACAAAAGTTGAGTGA TGCAGGCATAATTGGCTATAGGCAACTA	Pfba cloning in pRLG770
PFBAP770R ^c	AGCTTAGTTGCCTATAGCCAATTATGCCTGCATCAC TCAACTTTTGTCTGTGATATTTCTG	Pfba cloning in pRLG770
SIGAPECF ^b	GCGAATTCATCCTCAGCATCACTC	sigA cloning in pEC-XT99A
SIGAPECR ^b	TGTCTAGACGAACCAAAGCAACAG	sigA cloning in pEC-XT99A
SIGBPECF ^b	AGGAATTCGTTGAACCTCTTGAAC	sigB cloning in pEC-XT99A
SIGBPECR ^b	GCTCTAGAACTCGCCGGTAAAATA	sigB cloning in pEC-XT99A
SIGCPECF ^b	GGTGAATTCGGTCTGAACTGGTAT	sigC cloning in pEC-XT99A
SIGCPECR ^b	TTGATCTAGATCATCTGCTAACCTTGG	sigC cloning in pEC-XT99A
SIGDPECXTF ^b	CTGAATTCATAACTTTTAGGGTTTTGATG	sigD cloning in pEC-XT99A

SIGDPECXTR ^b	GTCT CTAG ATTACTTGTTCTCCTGCTGCTC	<i>sigD</i> cloning in pEC-XT99A
EXSIGETCF1 ^c	AAGAATT CGTCGACAGGATGAGGATCGTTTCGCAT GAAAAAGAAAGTCCCGAGATGACGCACCCG	<i>sigE</i> cloning in pEC-XT99A
EXSIGETCR1 ^b	AATCTAG AAAGTTCCTGTCCGCACCAC	<i>sigE</i> cloning in pEC-XT99A
EXSIGHTCF1 ^b	AAGAATTCTGCAG ATAGTCAACACGCATTTTCGAAA GGGGC	<i>sigH</i> cloning in pEC-XT99A
EXSIGHTCR1 ^b	AATCTAGACGAGTCGCTGCGGTTGAGA	<i>sigH</i> cloning in pEC-XT99A
EXSIGMTCF1 ^b	AAGAGCTCTGCAGG CCCCATACTAAGCCGCATAA	<i>sigM</i> cloning in pEC-XT99A
EXSIGMTCR1 ^b	AATCTAGATCAAAGTAGTAAACGTAAAAGTGC	<i>sigM</i> cloning in pEC-XT99A

^a sites for restriction enzymes are in italics, mismatched nucleotides are in bold

^b oligonucleotide used for PCR cloning

^c oligonucleotide used for direct association of complementary strands (labeled F and R) followed by cloning of the formed double stranded DNA fragments

Table S2 Identification of sigma factor σ^M by LC-MS/MS analysis. The table shows the sequence of the identified peptide, the corresponding Mascot score, m/z value and charge of the precursor ion used for MS/MS event, experimental and calculated molecular weight of the peptide, and mass error in ppm.

Peptide sequence	Mascot score	MS/MS precursor		Molecular weight		Error [ppm]
		m/z	Charge	Experimental	Calculated	
SAIDQLHPDQR	29	427.2175	3	1278.6307	1278.6317	0.77
LATDPLGYLDVAMTIR	49	874.9650	2	1747.9154	1747.9178	1.37
LATDPLGYLDVAMoxTIR	61	882.9614	2	1763.9082	1763.9128	2.56
KPEDAQDILQEALFR	35	591.6435	2	1771.9087	1771.9104	0.99