

**Table 1S.** Strains, phages, plasmids and oligonucleotides used in this study

	Characteristics	Reference or source
<b>Strains</b>		
<i>E. coli</i>		
DH5 $\alpha$	<i>supE44 <math>\Delta</math>lacU169(<math>\phi</math>80 <i>lacZ</i><math>\Delta</math>M15)<i>hsdR17 recA1 endA1 gyrA96 thi-1 relA1</i></i>	Lab stock
ER2267	<i><math>\Delta</math>(argF-lacZ)U169 glnV44 e14'(McrA') recA1 endA1 thi-1 <math>\Delta</math>(mcrC-mrr)114::IS10/F' proA<sup>+</sup>B<sup>+</sup> lacI<sup>q</sup> <math>\Delta</math>(lacZ)ZM15 zz::mini-tn10 (Kan<sup>R</sup>)</i>	New England Biolabs
<i>B. subtilis</i>		
CU1065	W168 <i>attSP<math>\beta</math> trpC2</i>	(Vander Horn and Zahler, 1992)
ZB307A	W168 SP $\beta$ c2 $\Delta$ 2::Tn917::pSK10 $\Delta$ 6	(Zuber and Losick, 1987)
HB2059	CU1065 <i>amyE::cat</i>	This study
HB7503	CU1065 <i>mntR::kan</i>	(Que and Helmann, 2000)
HB2500	HB2059 <i>mntR::kan</i>	This study
HB2501	CU1065 <i>fur::kan</i>	(Baichoo et al., 2002)
HB2502	HB2059 <i>fur::kan</i>	This study
HB2503	HB2059 <i>amyE::dtxR</i>	This study
HB2504	HB2500 <i>amyE::dtxR</i>	This study
HB2505	HB2502 <i>amyE::dtxR</i>	This study
HB2506	ZB307A SP $\beta$ 2506[ <i>Pdhb-toxO-cat-lacZ</i> ]	This study
HB7510	ZB307A SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	(Que and Helmann, 2000)
HB2507	HB2059 SP $\beta$ 2506[ <i>Pdhb-toxO-cat-lacZ</i> ]	This study
HB2508	HB2503 SP $\beta$ 2506[ <i>Pdhb-toxO-cat-lacZ</i> ]	This study
HB2509	HB2504 SP $\beta$ 2506[ <i>Pdhb-toxO-cat-lacZ</i> ]	This study
HB2510	HB2505 SP $\beta$ 2506[ <i>Pdhb-toxO-cat-lacZ</i> ]	This study
HB2613	HB2501 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2511	HB2502 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2512	HB2059 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2521	HB2500 <i>amyE::mntR</i>	This study

HB2522	HB2500 <i>amyE::mntR</i> D8M	This study
HB2523	HB2500 <i>amyE::mntR</i> E99C	This study
HB2524	HB2500 <i>amyE::mntR</i> D8M, E99C	This study
HB2525	HB2500 <i>amyE::mntR</i> E99D	This study
HB2526	HB2500 <i>amyE::mntR</i> D8M, E99D	This study
HB2527	HB2500 <i>amyE::mntR</i> G100R	This study
HB2528	HB2500 <i>amyE::mntR</i> D8M, G100R	This study
HB2529	HB2500 <i>amyE::mntR</i> E99C, G100R	This study
HB2530	HB2500 <i>amyE::mntR</i> D8M, E99C, G100R	This study
HB2531	HB2500 <i>amyE::mntR</i> E99D, G100R	This study
HB2532	HB2500 <i>amyE::mntR</i> D8M, E99D, G100R	This study
HB2533	HB2059 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2534	HB2500 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2535	HB2521 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2536	HB2522 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2537	HB2523 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2538	HB2524 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2539	HB2525 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2540	HB2526 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2541	HB2527 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2542	HB2528 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2543	HB2529 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2544	HB2530 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2545	HB2531 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2546	HB2532 SP $\beta$ 7510[ <i>PmntH-cat-lacZ</i> ]	This study
HB2547	HB2059 <i>amyE::dtxR</i> M10D	This study
HB2548	HB2059 <i>amyE::dtxR</i> C102E	This study
HB2550	HB2059 <i>amyE::dtxR</i> M10D, C102E	This study
HB2552	HB2059 <i>amyE::dtxR</i> C102E, R103G	This study
HB2553	HB2059 <i>amyE::dtxR</i> M10D, C102E, R103G	This study
HB2588	HB2502 <i>amyE::dtxR</i> M10D, C102E	This study

HB2554	HB2547 SP $\beta$ 2506[ <i>dhb'</i> - <i>toxO-cat-lacZ</i> ]	This study
HB2555	HB2548 SP $\beta$ 2506[ <i>dhb'</i> - <i>toxO-cat-lacZ</i> ]	This study
HB2557	HB2550 SP $\beta$ 2506[ <i>dhb'</i> - <i>toxO-cat-lacZ</i> ]	This study
HB2559	HB2552 SP $\beta$ 2506[ <i>dhb'</i> - <i>toxO-cat-lacZ</i> ]	This study
HB2560	HB2553 SP $\beta$ 2506[ <i>dhb'</i> - <i>toxO-cat-lacZ</i> ]	This study
HB2595	HB2588 SP $\beta$ 2506[ <i>dhb'</i> - <i>toxO-cat-lacZ</i> ]	This study
<b>Phages</b>		
SP $\beta$ 7510	SP $\beta$ c2 $\Delta$ 2::Tn917:: $\phi$ ( <i>mntH-cat-lacZ</i> )	(Que and Helmann, 2000)
SP $\beta$ 2506	SP $\beta$ c2 $\Delta$ 2::Tn917:: $\phi$ ( <i>dhb'</i> - <i>toxO-cat-lacZ</i> )	This study
<b>Plasmids</b>		
pUC19	General cloning vector	Lab stock
pJPM122	<i>cat-lacZ</i> operon fusion vector for phage SP $\beta$	(Slack et al., 1993)
pDG1730	Ectopic integration vector at the <i>B. subtilis amyE</i> locus	(Guérout-Fleury et al., 1996)
pDSK29	pDSK519 derivative carrying a 5KB <i>Sau3A</i> DNA fragment containing <i>dtxR</i> .	(Schmitt and Holmes, 1991)
pHB6548	pJPM122 derivative with a 400 bp <i>HindIII-BamHI</i> fragment carrying <i>dhbA</i> promoter region	(Bsat and Helmann, 1999)
pHB2504	pJPM122 derivative with a 159 bp <i>HindIII-BamHI</i> fragment carrying the chimeric <i>dhb-toxO</i> promoter.	This study
pHB2510	pDG1730 derivative with a 726 bp <i>HindIII-EcoRI</i> fragment containing <i>dtxR</i> ORF fused to an efficient ribosome binding site	This study
pHB2511	pHB2510 with a 250 bp <i>BamHI-HindIII</i> fragment containing the xylose inducible promoter <i>xylA</i> fused to <i>E. coli lac</i> operator	This study
pHB2512	As pHB2511 but with <i>dtxR</i> M10D	This study
pHB2513	As pHB2511 but with <i>dtxR</i> C102E	This study
pHB2514	As pHB2511 but with <i>dtxR</i> C102E, R103G	This study
pHB2515	As pHB2511 but with <i>dtxR</i> M10D, C102E	This study
pHB2516	As pHB2511 but with <i>dtxR</i> M10D, C102E, R103G	This study
pHB2518	pUC19 derivative with a 483 bp <i>BamHI-KpnI</i> fragment	This study

containing the *mntR* promoter region fused to *E. coli lac* operator

pHB2519	pHB2518 with a 643 bp <i>KpnI-EcoRI</i> fragment containing <i>mntR</i> ORF and its own ribosome binding site	This study
pHB2520	As pHB2519 but with <i>mntR</i> D8M	This study
pHB2521	As pHB2519 but with <i>mntR</i> E99C	This study
pHB2522	As pHB2519 but with <i>mntR</i> G100R	This study
pHB2523	As pHB2519 but with <i>mntR</i> E99D	This study
pHB2524	As pHB2519 but with <i>mntR</i> D8M, E99C	This study
pHB2525	As pHB2519 but with <i>mntR</i> D8M, G100R	This study
pHB2526	As pHB2519 but with <i>mntR</i> D8M, E99D	This study
pHB2527	As pHB2519 but with <i>mntR</i> E99C, G100R	This study
pHB2528	As pHB2519 but with <i>mntR</i> E99D, G100R	This study
pHB2529	As pHB2519 but with <i>mntR</i> D8M, E99C, G100R	This study
pHB2530	As pHB2519 but with <i>mntR</i> D8M, E99D, G100R	This study
pHB2550	pDG1730 derivative with a 1120 bp <i>EcoRI-BamHI</i> subcloned fragment from pHB2519 and containing a full length <i>mntR</i> gene	This study
pHB2551	As pHB2550 but with <i>mntR</i> D8M	This study
pHB2552	As pHB2550 but with <i>mntR</i> E99C	This study
pHB2553	As pHB2550 but with <i>mntR</i> G100R	This study
pHB2554	As pHB2550 but with <i>mntR</i> E99D	This study
pHB2555	As pHB2550 but with <i>mntR</i> D8M, E99C	This study
pHB2556	As pHB2550 but with <i>mntR</i> D8M, E99D	This study
pHB2557	As pHB2550 but with <i>mntR</i> D8M, G100R	This study
pHB2558	As pHB2550 but with <i>mntR</i> E99C, G100R	This study
pHB2559	As pHB2550 but with <i>mntR</i> E99D, G100R	This study
pHB2560	As pHB2550 but with <i>mntR</i> D8M, E99C, G100R	This study
pHB2561	As pHB2550 but with <i>mntR</i> D8M, E99D, G100R	This study

**Oligonucleotide primers**

200            dhb 5'                            GCGTTTTAAGCTTCACCCTGA

844	tox1	GCTATCCTAATTATATCCAAATGTCATGTGACAGT
845	tox2	TAATTAGGTAAAGCTATCCTAATTATATCCAAATG
846	tox3	TCGGGATCCATAAAAATAATTAGGTAAAGCTATCCT
847	dtxR up	TCGAAGCTTAAGGAGGAAATACAATGAAGGACTTAGTC
848	dtxr do	CCCGAATCCCGCCTTTTAGTATTTAGAGT
849	xylA up	TTGGATCCGCGATATCCACTTCATCCA
850	xyl(lac)do1	GCTCACAATTCAGATGCATTTTATTTTCATATAGT
851	xyl(lac)do2	AATTGTTATCCGCTCACAATTCAGATGCATTT
852	lacI do (H3)	GTAAGGCTTAATTGTTATCCGCTCACAATT
853	M10D	GATACCACAGAGGATTACTTGCGTACT
854	C102E	CACGATGAAGCCGAACGCTGGGAACACGTT
855	C102E(R/G)	CACGATGAAGCCGAAGGCTGGGAACACGTT
856	mntR-BL	ATGGATCCGTGGTATGAACTAGTGGTTGAG
857	mntR-Lac1	TTAACTTTATAAACCATTACAAGTTTACAC
858	mntRlac2	TCCGCTCACAATTTTAACTTTATAAACCATTAC
859	mntR-lac(kpnI)	AAGGTACCAATTGTTATCCGCTCACAATTTTAACT
860	mntR-S(KpnI)	AAGGTACCTTTTGGGAGGGTTTTCGATG
861	mntR-EcoRI	TGGAATTCATAAGCGCCTGCGAGCGCA
862	D8M new	CCAAGTATGGAAATGTATATTGAAGAG
863	E99C new	TATAACGATGTCTGCGGAATCGAACATC
864	G100R	TATAACGATGTCGAAAGAATCGAACATC
865	E99D	TATAACGATGTCGATGGAATCGAACATC
866	E99C-G100R	TATAACGATGTCTGCAGAATCGAACATC
867	E99D-G100R	TATAACGATGTCGATAGAATCGAACATC

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