

Supplementary file 1

Strains (<i>Escherichia coli</i>)	Alias	Genotype	Source and Comments
DH5 α Z1	AY75	<i>attB</i> (λ):: <i>lacI</i> ^f -P _{N25} - <i>tetR</i> :: <i>aadA endA1</i> <i>hsdR17</i> (rK-mK+) <i>glnV44</i> <i>thi-1 recA1 gyrA96 relA1</i> Δ (<i>lacIZYA-argF</i>)169 <i>deoR</i> <i>attB</i> (ϕ 80):: <i>lacZ</i> Δ M15	Lutz and Bujard, 1997; Spec ^R
DH5 α Z1 Δ <i>clpB</i>	AY153	DH5 α Z1 Δ <i>clpB</i> :: <i>kan</i>	This study; Spec ^R and Kan ^R
PIR2 F' P _{tac} - <i>tetR</i>	AY290	Δ <i>lac169 rpoS</i> (am) <i>robA1</i> <i>creC510 hsdR514 endA</i> <i>recA1 uidA</i> (Δ MluI):: <i>pir</i> F' P _{tac} - <i>tetR-lacZYA</i> ^f :: <i>tetRA</i>	This study; Tet ^R
DH5 α Z1 Δ <i>clpB</i>	AY295	DH5 α Z1 Δ <i>clpB</i> :: <i>FRT</i>	This study
DH5 α Z1 Δ <i>clpB</i> P _{LtetO-1} - <i>clpB</i>	AY321	DH5 α Z1 Δ <i>clpB</i> :: <i>FRT</i> <i>attB</i> (HK022)::P _{LtetO-1} - <i>clpB</i> - <i>t_{L3}</i> :: <i>kan</i>	This study; Spec ^R and Kan ^R
DH5 α Z1 Δ <i>clpB</i> P _{LtetO-1} - <i>clpB</i> Y653A	AY322	DH5 α Z1 Δ <i>clpB</i> :: <i>FRT</i> <i>attB</i> (HK022)::P _{LtetO-1} - <i>clpB</i> Y653A- <i>t_{L3}</i> :: <i>kan</i>	This study; Spec ^R and Kan ^R
DH5 α Z1 Δ <i>clpB</i> P _{LtetO-1} - <i>clpB</i> E279A/E678A	AY323	DH5 α Z1 Δ <i>clpB</i> :: <i>FRT</i> <i>attB</i> (HK022)::P _{LtetO-1} - <i>clpB</i> E279A/E678A- <i>t_{L3}</i> :: <i>kan</i>	This study; Spec ^R and Kan ^R
DH5 α Z1 Δ <i>clpB</i> P _{LtetO-1} - <i>clpB</i> E432A	AY324	DH5 α Z1 Δ <i>clpB</i> :: <i>FRT</i> <i>attB</i> (HK022)::P _{LtetO-1} - <i>clpB</i> E432A- <i>t_{L3}</i> :: <i>kan</i>	This study; Spec ^R and Kan ^R
DH5 α Z1 Δ <i>clpB</i> P _{LtetO-1}	AY325	DH5 α Z1 Δ <i>clpB</i> :: <i>FRT</i> <i>attB</i> (HK022)::P _{LtetO-1} - <i>t_{L3}</i> :: <i>kan</i>	This study; Spec ^R and Kan ^R
Strains (<i>Saccharomyces cerevisiae</i>)	Alias	Genotype	Source and Comments
YJW187 [<i>pin</i>] [<i>psi</i>]	SG775	74D-694 MATa <i>ade1-14</i> (UGA) <i>his3 leu2 trp1</i> <i>ura3</i> [<i>pin</i>] [<i>psi</i>]	Garrity et al., 2010; obtained by serial passage on YPD agar supplemented with 3 mM GuHCl; phenotypically [<i>pin</i>] [<i>psi</i>]
YJW187 [<i>PSI</i> ^f]	SG862	74D-694 MATa <i>ade1-14</i> (UGA) <i>his3 leu2 trp1</i> <i>ura3</i> [<i>PSI</i> ^f]	Garrity et al., 2010; phenotypically strong [<i>PSI</i> ^f]
YJW187 [<i>PSI</i> ^f]	SG863	74D-694 MATa <i>ade1-14</i> (UGA) <i>his3 leu2 trp1</i> <i>ura3</i> [<i>PSI</i> ^f]	Garrity et al., 2010; phenotypically weak [<i>PSI</i> ^f]
Plasmids	Alias	Features	Source and Comments
pBR322-SUP35 NM	pAY45	<i>bla</i> P _{tac} -SUP35 NM- <i>mCherry-his_{6x}-t_{T7}</i> pMB1 <i>ori</i>	This study; produces Sup35 NM (Sup35 residues 1-253) fused to

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			mCherry2 and a hexahistidine tag under the control of the tac promoter; Amp ^R
pSC101 ^{TS}	pAY50	<i>cat P_{tac-tL3} repA^{TS} pSC101 ori</i>	This study; derived from pMAK700 (Hamilton et al., 1989); Cam ^R
pSC101 ^{TS} - <i>NEW1</i>	pAY48	<i>cat P_{tac}-NEW1-mGFP-tL3 repA^{TS} pSC101 ori</i>	This study; produces residues 50-100 of New1 fused to mGFP _{mut3} under the control of the tac promoter; Cam ^R
pSC101 ^{TS} - <i>NEW1-clpB</i>	pAY71	<i>cat P_{tac}-NEW1-mGFP-tL3-P_{clpB}-clpB repA^{TS} pSC101 ori</i>	This study; produces residues 50-100 of New1 fused to mGFP _{mut3} under the control of the tac promoter; produces ClpB under the control of its native promoter; Cam ^R
pSC101 ^{TS} - <i>recA</i>	pAY69	<i>cat P_{tac-recA-tL3} repA^{TS} pSC101 ori</i>	This study; produces RecA under the control of the tac promoter; Cam ^R
pAH70-P _{LtetO-I}	pAY152	<i>kan P_{LtetO-I-tL3} attP(HK022) γR6K ori</i>	This study; derived from pAH70 (Haldimann and Wanner, 2001); harbors the P _{LtetO-I} promoter(Lutz and Bujard, 1997); Kan ^R
pAH70-P _{LtetO-I} - <i>clpB</i>	pAY154	<i>kan P_{LtetO-I-clpB-tL3} attP(HK022) γR6K ori</i>	This study; produces wild-type ClpB under the control of the P _{LtetO-I} promoter; Kan ^R
pAH70-P _{LtetO-I} - <i>clpB</i> Y653A	pAY155	<i>kan P_{LtetO-I-clpB} Y653A-tL3 attP(HK022) γR6K ori</i>	This study; produces ClpB Y653A under the control of the P _{LtetO-I} promoter; Kan ^R
pAH70-P _{LtetO-I} - <i>clpB</i> E279A/E678A	pAY156	<i>kan P_{LtetO-I-clpB} E279A/E678A-tL3 attP(HK022) γR6K ori</i>	This study; produces ClpB E279A/E678A under the control of the P _{LtetO-I} promoter; Kan ^R
pAH70-P _{LtetO-I} - <i>clpB</i> E432A	pAY157	<i>kan P_{LtetO-I-clpB} E432A-tL3 attP(HK022) γR6K ori</i>	This study; produces ClpB E432A under the control of the P _{LtetO-I} promoter; Kan ^R
pAH69	N/A	<i>bla λP_{R-int}HK022 λ.cl857 repA^{TS} R101 ori</i>	Haldimann and Wanner, 2001; produced HK022 Int under the control of the λP _R promoter; Amp ^R
pCP20	N/A	<i>bla cat λP_{R-flp} λ.cl857 repA^{TS} p15A ori</i>	Cherepanov and Wackernagel, 1995; produced Flp recombinase under the control of the λP _R promoter; Amp ^R and Cam ^R
pRS316	N/A	<i>URA3 bla CEN6 pMB1 ori</i>	Sikorski and Hieter, 1989; <i>URA3</i> shuttle vector