Table S3. Primers used in this study

Primer use/name		5'-3' Sequence
higBA KO		
	JPN150	**TGCTACATACGTGAAGTTATGACGCATAAAGAATACGATGTGTAGGCTGGAGCTGCTTCG**
	JPN151	**TTAATCAATAAACAAGGCGGGAGAAATGCCGAATCGCGTTCATATGAATATCCTCCTTAG**
higBA KO confirm		
	JPN152	**GCAATGTCTGCCCAGTTCTG**
	JPN153	**GCTGCGATGTAGCTATGGAG**
hipBA KO		
	JPN073	**TTGCTGTGGACGTATGACATGATGAGCTTTCAGAAGATTGTGTAGGCTGGAGCTGCTTCG**
	JPN074	**TTATGCGCACCAACATAAACCAAGGGAGAATCCAGTCGTTCATATGAATATCCTCCTTAG**
hipBA KO confirm		
	JPN075	**CAGCGTTTATCCCGTAGAG**
	JPN076	**GGAAGTCAGAAATCACAACG**
sohA-yhaV KO		
	JPN077	**ATGCCCGCTAATGCTCGCTCTAACGCTGTACTGACCACTGTGTAGGCTGGAGCTGCTTCG**
	JPN078	**TCAATGGCTTTCTTCTGTCTCTTGGGTGAGGCTTTCCCAGCATATGAATATCCTCCTTAG**
sohA-yhaV KO confirm		
	JPN079	**AGTCCACACATCCATTA**
	JPN080	**GTTGAAGTGATTCTGGTC**
ybaJ-hha KO		
	JPN154	**ATGGATGAATACTCACCCAAAAGACATGATATCGCACATGTGTAGGCTGGAGCTGCTTCG**
	JPN155	**TTAGCGAATAAATTTCCATACTGAGGAAGGGATCTTGTCGCATATGAATATCCTCCTTAG**

ybaJ-hha KO confirm

JPN156	**GCAAGTCCAGGTCAGTAAG**
JPN157	**CTGTGCTCATTACTGACTTC**

yefM-yoeB KO

JPN065	**ATGCGTACAATTAGCTACAGCGAAGCGCGTCAGAATTTTGTGTAGGCTGGAGCTGCTTCG**
JPN070	**TCAATAATGATAACGACATGCTGCAATGAGCAGTGAATCGCATATGAATATCCTCCTTAG**

yefM-yoeB KO confirm

JPN067	**CGTCTCGCTGACAATGTCTTG**
JPN072	**TTCATCCGTTATCTCCTG**

pasTI KO

JPN081	**ATGATATTATTTGTTGGATTTTTGTTGATGGAAATTGTTGTGTAGGCTGGAGCTGCTTCG**
JPN082	**TTATTTATTCGCTGATTTTTCTGCTCGTTGCCTGCGAAGCCATATGAATATCCTCCTTAG**

pasTI KO confirm

JPN083	**CTTAGCATGAACCCGATG**
JPN084	**GTTGCTCTCAAAGACGTT**

Clm^R KI

TW1	**TCTGGCGTAGCCTGGGAGTTATTGCCGGATGCGATGCTGGTGTGTAGGCTGGAGCTGCTTCG**
TW2	**TCACGTAAAAAAACGTCTAATCCGTAGACCGGATAAGAGGCATATGAATATCCTCCTTAG**

Clm^R KI confirm

TW3	**GGATGGACGAAGGTACTGGA**
TW4	**GGTGAGACACTGACCACACG**

pPN007

JPN212	**GCCCA CTGCAG ATGATATTATTTGTTGGAT**
JPN201	**TTCGG AAGCTT TTACCTGGCACTGTAGACCT**

pPN009

JPN106	**GCCGC GGATCC G ATGATATTATTTGTTGGATT**
JPN107	**ATTCG GGTACC TTACCTGGCACTGTAGACCT**

pPN010

JPN108	**ATTCG GGATCC G GTGCCAGGTAAAATTGCCGT**
JPN109	**CCCGC GGTACC TTATTTATTCGCTGATTTTT**

pPN011

JPN106	**GCCGC GGATCC G ATGATATTATTTGTTGGATT**
JPN109	**CCCGC GGTACC TTATTTATTCGCTGATTTTT**

pPN012

JPN126	**CCCGG CTGCAG ATGATATTATTTGTTGGATT**
JPN127	**ATCCG AAGCTT CTATCCCTTATCGTCGTCATCCTTGTAGTC CCTGGCACTGTAGACCTCT**

pPN019

JPN126	**CCCGG CTGCAG ATGATATTATTTGTTGGATT**
JPN141	**ATCCG AAGCTT CTATCCCTTATCGTCGTCATCCTTGTAGTC TGGTCCTCCTCCTCC CCTGGCACTGTAGACCTCT**

pPN020

JPN140	**CCCGG CTGCAG GACTACAAGGATGACGACGATAAGGGA GGAGGAGGAGGACCA ATGATATTATTTGTTGGAT**
JPN107	**ATTCG GGTACC TTACCTGGCACTGTAGACCT**

pPN025

JPN160	**CCCGG CTGCAG GACTACAAGGATGACGACGATAAGGGA ATGATATTATTTGTTGGAT**
JPN107	**ATTCG GGTACC TTACCTGGCACTGTAGACCT**

pPN028

JPN183	**GACGG CTGCAG ATGATATTATTTGTTGGAT**
JPN184	**TTCGG AAGCTT TTACCTGGCACTGTAAACC**

pPN041

JPN206	**ATCCGCTGCAGATGCACCACCACCACCACCACGGAATGATATTATTTGTTGGAT**
JPN207	**ATCCGAAGCTTTTACCTGGCACTGTAGACCT**

pPN043

JPN183	**GACGG CTGCAG ATGATATTATTTGTTGGAT**
JPN210	**ATCCG AAGCTT TTAGTGGTGGTGGTGGTGGTG CCTGGCACTGTAGACCTCTT**

pPN054

JPN211	**CGTCC GAGCTC ATGATATTATTTGTTGGAT**
JPN207	**ATCCGAAGCTTTTACCTGGCACTGTAGACCT**

pPN055

JPN212	**GCCCA CTGCAG ATGATATTATTTGTTGGAT**
JPN223	**CAGGT AAGCTT TTA AGCCTTAGACACATCTACCG**

pPN064

JPN232	**CACAG CTGCAG GGGATCAGCAAAACGTTTAC**
JPN233	**ATCCG AAGCTT TTACCTGGCACTGTAGACC**

pPN067

JPN236	**CTGAG CTGCAG ATGGAAATTGTTATGCCTC**
JPN201	**TTCGG AAGCTT TTACCTGGCACTGTAGACCT**

pPN068

JPN237	**CACAG CTGCAG ATGCCTCAGATTAGTCGGA**
JPN201	**TTCGG AAGCTT TTACCTGGCACTGTAGACCT**

pPN069

JPN239	**CGTAG CTGCAG ATGTATCAGTTAGTGAATG**
JPN201	**TTCGG AAGCTT TTACCTGGCACTGTAGACCT**

pPN078

JPN106	**GCCGC GGATCC G ATGATATTATTTGTTGGATT**
JPN127	**ATCCG AAGCTT CTATCCCTTATCGTCGTCATCCTTGTAGTC CCTGGCACTGTAGACCTCT**

pPN079

JPN236	**CTGAG CTGCAG ATGGAAATTGTTATGCCTC**
JPN127	**ATCCG AAGCTT CTATCCCTTATCGTCGTCATCCTTGTAGTC CCTGGCACTGTAGACCTCT**

pPN080

JPN237	**CACAG CTGCAG ATGCCTCAGATTAGTCGGA**
JPN127	**ATCCG AAGCTT CTATCCCTTATCGTCGTCATCCTTGTAGTC CCTGGCACTGTAGACCTCT**

pPN081

JPN239	**CGTAG CTGCAG ATGTATCAGTTAGTGAATG**
JPN127	**ATCCG AAGCTT CTATCCCTTATCGTCGTCATCCTTGTAGTC CCTGGCACTGTAGACCTCT**

pPN083

JPN261	**CCTTG AAGCTT CTTGCAGGGCAAGTCCC**
JPN262	**GCCAG CCATGG TTATTTATTCGCTGATT**