

Table S1. Primers used in this study.

Name	Sequence	Enzyme
pta promoter (Ppta)		
Ppta-P1	GAATTCATTTGTCAACTATAGATG	EcoRI
Ppta-P2	GGTACCTTTAAATTTAACACAAAATTACACACAC	KpnI
Butyrate pathway genes		
thl-P1	GGTACCAGGAGGTTAGTTAGAATGAAAGAAG	KpnI
thl-P2	CTCGAGCTAGCACTTTTCTAGCAATATTGC	XhoI
crt-P1	CTCGAGTTTAGGAGGATTAGTCATGGAECTAAAC	XhoI
crt-P2	TCCACCTGCGCCACCATACTC	
crt-P3	CTCGAGAGGAGGATTAGTCATGGAECTAAAC	XhoI
bcd-etfB-P1	ATGGGTCAGTATGGTATGATG	
bcd-etfB-P2	TCCCTCCTAACTTAAATATAGTG	
etfA-P1	AGCCTGTTAAGGAAGCAGCTGC	
etfA-P2	CTGCAGTTAATTATTAGCAGCTTTAACTTGAGC	PstI
hbd-P1	CTGCAGGGAGGTCTGTTTAATGAAAAAGGTATG	PstI
hbd-P2	GGATCCTTATTTTGAATAATCGTAGAAACC	BamHI
ptb-P1	GGATCCGAGCACGTTAATCATTTAACATAG	BamHI
buk-P1	GTCGACTTTATTATTTGTATTCCTTAGC	Sall
loxP cassette		
loxP1-T	AATTATAACTTCGTATAGCATAACATTATACGAAGTTATCTCGAGTCAGACTAGTG	
loxP1-B	AATTCAGTAGTCTGACTCGAGATAACTTCGTATAATGTATGCTATACGAAGTTAT	
loxP2-T	AGCTTATAACTTCGTATAGCATAACATTATACGAAGTTATCCGCGGTCAGAGATCT	
loxP2-B	AGCTAGATCTCTGACCGCGGATAACTTCGTATAATGTATGCTATACGAAGTTATA	
catP-P1	ACCAGATCTTTTTTCGGCAAGTGTTCAAG	BglII
catP-P2	TCTCCGCGGAACACAAGGTCTTTGTTACTAAC	SacII
ermC-P1	TCTGCATGCTAGATAAATCTCTCATATC	SphI
ermC-P2	TCTAAGCTTCGCTCATATTTATATAG	HindIII
PermB-kan		

PermB-P1	ATCGATGAAGCAAACCTTAAGAGTGTG	ClaI
Km-P1	GTAACTTAAAAAATTCATCTAATAATC	HpaI
pta-int		
pta-int-P1	ACTAGTTCAGATAAACTAAAGGCATATGC	SpeI
pta-int-P2	GGTACCAGGAGCCTTTAAACTTGC	KpnI
adhE1-int		
adhE1-int-P1	ACTAGTTCATCCCAAGGTGGTATAG	SpeI
adhE1-int-P2	GGTACCCTGTTCTGCGGATGTTGC	KpnI
ctf-int		
39430-P1	ACTAGTATGGATTATGATACCTTG	SpeI
39430-P2-	GGTACCTATTAATCTTGGAATAGCC	KpnI
qRT-PCR		
recA-F	TGTGGATGCCATTTCAACAG	
recA-R	TATGAAGTGCCACCGTAGTC	
pta-F	CCTGTATGCCAAGGATTTGC	
pta-R	TGAGCTTGTGCTTGAAGTGC	
thl-F	AATCCAGCAAGACAGGCATC	
thl-R	ATTACGTCAGCATCTCCTGC	
crt-F	ATAGCTTCAAGCAACGCAAG	
crt-R	CATGCCCATTCCAATAATC	
bcd-F	AATTCCAAGGTCTTGCATGG	
bcd-R	AGCTCTTGCAGCATCAACTG	
etfA-F	ACAATAGCCGCTTCAAGAGC	
etfA-R	GCATACCTGCTAAATGCTGG	
etfB-F	GTGGACTGCCGATGATATAG	
etfB-R	GCAGCTGCTTCCTTAACAGG	
hbd-F	GGTTCAGGAATTGCTCAGGC	
hbd-R	CTAAATCGCAATCAGCTGCC	
ptb-F	TGCTCCAATTTGTGCAGTTG	

ptb-R	TCAAGTGCTAAAGGTCCGTC
buk-F	GTTCAAGGTCAGCATGCGTC
buk-R	CAAGTCATCCACAACAACCTG
