

Supplementary Material

Table S1. List of real-time PCR primers for EHEC bacteria

Gene name	Primer sequence (5'-3')	Product size
rpoA	F:GTGACCCTTGAGCCTTTAGAG R:ACACCATCAATCTCAACCTCG	116
16S rRNA	F:GAAAGCGTG GGGAGCAAAC R:ACATGCTCCACCGCTTGTG	188
stx1A	F:CCCACGGACTCTTCCATCTG R:ATTCTGGGAAGCGTGGCATT	114
stx2A	F:TGTCTGAAACTGCTCCTGTG R:GATATTCTCCCCACTCTGACAC	127
cpxA	F:TGGTGAAAGCAAGGAACTGG R:TGATTGGCTTTGATGGTCTCG	132
cpxR	F:GATGACTATCTCCCGAAACCG R:ATCAACTTCCAGTGTCCGGTG	129
tir	F:GAGGGAGTCAAATAGCGGTG R:ATCTGAACGAAGGCTGGAAG	76
ler	F:CGAGTCCATCATCAGGCACA R:TACAGCAGGAAGCAAAGCGA	132
eae	F:CATCACCACCGCTTGCTTTC R:GGGCTGAGGTAAAGCGACT	150
espA	F:AGCTATTTGAGGAACTCGGTG R:CATCTTTTGTGCCGTGGTTG	140
espB	F:GGTCAAGGCTACGGAAAGTG R:TCTTCAGCAAAGTCAGAGGC	144
escC	F:CTGAAGACAATGGCAAGTAATGG R:ACTGCATTAAGACGTGGATCAG	119
escV	F:GAGTGCAAAAGGAAAGCCAG R:ATGATACCAGCAATAGCGTCC	82
csgA	F:GGCAGGTGTTGTTCCCTCAGT R:AAAGCCACGTTGGGTCAGAT	238
csgB	F:GGTAGTAGCAACCGGGCAAA R:GCACCTTGCGAAATACTGGC	101
fimA	F:CCAGTTCTGCTGTCGGTTTT R:TCAGGGTTGTTTGCTCACTG	231
fimC	F:GACACTTCACCTTTTGCGG R:CAATGGCACCTGAAGAAGCG	160
luxS	F:CATACCCTGGAGCACCTGTT R:TGATCCTGCACTTTCAGCAC	191
sdiA	F:AGACTTTCGCGCACCAGTAA	181

qseB	R:AAGCACAGCCGTTATGGGAA	56
	F:TGAGCCGGTACTGATCCTGA	
	R:GCCCTTCTACACGTTCTCTCC	
qseC	F:CCGGACAACCGCTATTGCTA	300
	R:CCTTCGCCTCAAATCCACCT	
flhD	F:CAGTGCCGCTAATGTTGTCG	57
	R:TCCGCTATGTTTCGTCTCGG	

Table S2. List of real-time PCR primers for IPEC-J2

Gene Name	Primers (5'-3')	Accession no.
Caspase-1	F:AATCTCACCGCTTCGGACAT	NM_214162
	R:TCCATACGACCCCTTGCTTC	
Caspase-3	F:CGAGGCACAGAATTGGACTG	NM_214131
	R:CCAGGAATAGTAACCAGGTGCTG	
Caspase-8	F:ACCAGGTCGGAATTGAAGGAC	NM_001031779
	R:GCAAGGTCATGTCATCATCCAG	
Caspase-9	F:CAACCTGACTGCCAAGCAAA	XM_003127618
	R:TGACAGCCGTGAGAGAGCAC	
Bax	F:CTACCAAGAAGTTGAGCGAGTGTCTC	XM_003127290
	R:GTGTCCACGGCTGCGATCATC	
Bcl-2	F:AGCAGGTATTGAACGAACCTCTCCG	NM_214285
	R:AGGCTCTAGGTGGTCATTTCAGGTAAG	
Ki67	F:TTGTCCCTGAATCCGCAAGA	NM_001101827
	R:TTCTCTGGTTGCTTGGTTGC	
ZO-1	F:CTCTTGGCTTGCTATTTCG	XM_021098896
	R:AGTCTTCCCTGCTCTTGC	
Claudin-1	F:TGCCCCCGAAAAACAACATC	NM_001244539
	R:CACATGAAAATGGCTTCCCTC	
Occludin	F:GGTAACTTGGAGGCGTCTTC	NM_001163647
	R:GTAGTCTGTCTCGTAATGGTCTTG	
MUC2	F:CGGTCAAGGACGACACCATC	XM_021082584
	R:TGTTCCACACGAGAGCAAGG	
IL-1 β	F:AGAGGGACATGGAGAAGCGA	NM_001302388
	R:GCCCTCTGGGTATGGCTTT	
IL-6	F:ATCAGGAGACCTGCTTGATG	NM_001252429
	R:TGGTGGCTTTGTCTGGATTC	
TNF- α	F:CTGTAGGTTGCTCCCACCTG	NM_214022
	R:CCAGTAGGGCGGTTACAGAC	
IFN- γ	F:GAGCCAAATTGTCTCCTTCTAC	NM_213948
	R:CGAAGTCATTTCAGTTTCCCAG	

IL-8	F:TCCTGCTTTCTGCAGCTCTC R:GGGTGGAAAGGTGTGGAATG	NM_213867
IL-10	F:CTGCATCCACTTCCCAACCA R:CCCATCACTCTCTGCCTTCG	NM_214041
TGF- β	F:GAAGCGCATCGAGGCCATTC R:GGCTCCGGTTCGACACTTTC	NM_214015
iNOS	F:CATCACCACGCCTCCAACCTCAG R:AGTCTCAAGCCTCTGCCTCTCG	NM_001143690
TLR1	F:GTCAGTCAGCACCGCAGTAA R:CAGACAACTGGAGGGTGGT	NM_001031775
TLR2	F:TCACTTGTCTAACTTATCATCCTCT R:TCAGCGAAGGTGTCATTATTGC	NM_213761
TLR4	F:GCCATCGCTGCTAACATCATC R:CTCATACTCAAAGATACACCATCG	NM_001293316
MyD88	F:GCTGGAACAGACCAACTAT R:TCCTTGCTTTGCAGGTAAT	NM_001099923
TRAF6	F:GGGAACGATACGCCTTACAA R:CTCTGTCTTAGGGCGTCCAG	NM_001105286
JNK	F:TGCTTTGTGGAATCAAGCAC R:TGGGCTTTAAGTCCCGATG	XM_021073087
NF- κ Bp65	F:CGAGAGGAGCACGGATACCA R:GCCCCGTGTAGCCATTGA	NM_001114281
GSK-3 β	F:CGAGACACACCTGCACTCTT R:CCGGCATTAGTATCTGAGGCT	NM_001128443
β -catenin	F:GAGCTGAGAGCGAGGGGAG R:ACAGCCGCTTTTCTGTCTGG	NM_214367
CCND1	F:TTGAAGGCGAGGTTCCAGTC R:GCTGGTTCTCTAGGTCAGCC	XM_021082686
DKK1	F:AGGGTGGCAACAAGTACCAA R:GCAGGCTAGGCAGATTTGTG	NM_001145384
DKK2	F:GCCTCGCCTTTGATTGCTTC R:CCCACAACCCCACTTGACTT	XM_003129269
FZD7	F:TGGTGAAGGTGCAGTGTTCT R:TGTAGGGCGCTGTAGGATAGG	XM_013984388
AXIN2	F:GCTATGGATTTTGGGGCCG R:GTCCCTCTCAGCAATCAGCG	XM_021066736
c-Myc	F:TCCACGCACCAGCACAATTA R:ATTGTGTGTCCGCCTCTTGT	NM_001005154
β -actin	F:TGGAACGGTGAAGGTGACAG R:CTTTTGGGAAGGCAGGGACT	XM_003124280
GAPDH	F:CGGAGTGAACGGATTTGGC R:CACCCCATTTGATGTTGGCG	NM_001206359

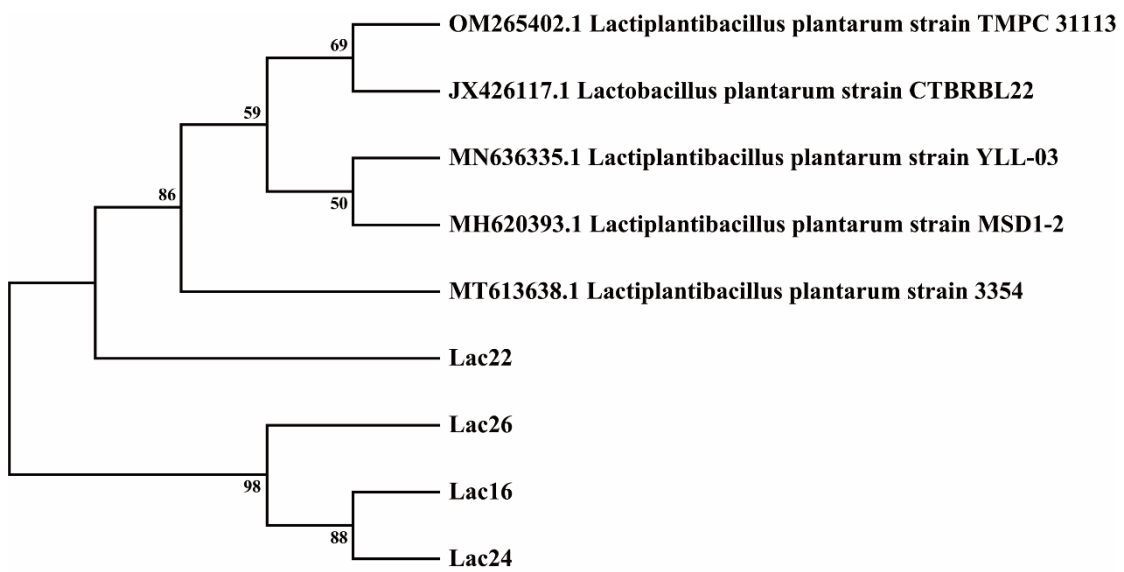


Figure S1 Phylogenetic tree of probiotics. The tree was constructed using software MEGA 10.1.8 by neighbor-joining method based on 16S rDNA gene sequences with 1000 replications in bootstrap test.