

Supporting Information

Table S1. Clinical sickness score.

Score	Appearance	Response to touch	Natural activity	Body color
0	Tonic and well hydrated	Alert without any stimulation	Moving normally in the cage	Pink
1	Slimmer, but still tonic and hydrated	Responding to mild stimulation (gentle foot touch)	Able to wriggle if put in the supine position	Pale or dark distal extremities, fingers/toes
2	Skinny, floppy, and dehydrated	Responding to Vigorous stimulation (foot pinch)	Unable to wriggle if put in the supine position	Paleness on the whole body
3	Gasping and in agony	Unresponsive even to vigorous stimulation (does not become alert when picked up and moved)	Not moving limbs and lying still, supine or lateral decubitus	Gray

Table S2. Macroscopic assessment score of intestines.

Score	Consistency	Color	Dilation
0	Normal, does not tear when dissecting from surrounding tissue	Normal, yellow/tan	Normal, no dilation
1	Moderately friable	Patchy discoloration, pink, congested	Patchy areas of dilation
2	Liquefied, jelly-like, extremely friable	Extensive discoloration, dark, necrotic	Extensive dilation throughout small bowel

Table S3. Primer sequences for real-time PCR.

Gene	Primer sequence (5'-3')	
	Forward	Reverse
TLR4	GAGGACTGGGTGAGAAACGA	AGATACACCAACGGCTCTGG
MyD88	GAGATCCGCGAGTTTGAGAC	CTGTTTCTGCTGGTTGCGTA
Claudin-1	AGGTCTGGCGACATTAGTGG	CCTGGCCAAATTCATACCTGG
ZO-1	TGCTCCAGCAGGTCCTAAGT	TGGTAGCTGAGGGCAGAACT
Occludin	CTTGTCTTGGGAGCCTTGAC	AAAGAGTATGCCGGCTGAGA
MUC2	AAGTGATTGTGTTCCGGGCT	ATGGAGATGTTCTTGGCGCA
IL-10	TGCGACGCTGTCATCGATTT	GTAGATGCCGGGTGGTTCAA

FOXP3	CAACACTCACCCACAACGTC	TGTACACGTGTGCGTTCTGA
ROR γ T	GCAAGTCCTACCGAGAGACG	TCTGATCATTCTGGCACAGC
IL-23	AGGACAACAGCCAGTTCTGTTT	GAGGCCAGTAGGGAGGTAT
IL-17A	TGGACTCTGAGCCGCAATG	ATGTGGTGGTCCAACCTCCC
Gapdh	AGACAGCCGCATCTTCTTGT	CTTGCCGTGGGTAGAGTCAT

Fig. S1. Phylogenetic tree of *L. rhamnosus* 1.0320 and other strains based on 16S rRNA gene sequences.

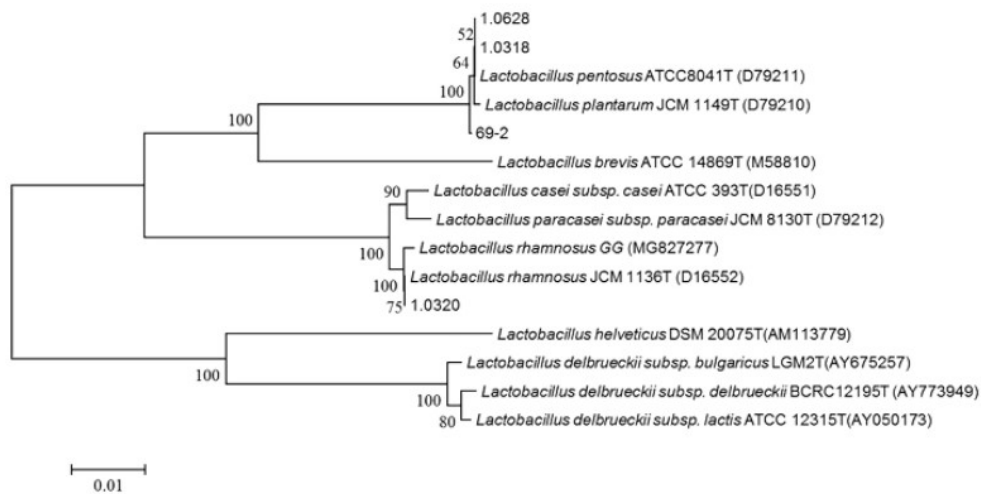


Fig. S2. Determination of probiotic characteristics of *L. rhamnosus* 1.0320. (A) Acid resistance of *Lactobacillus* strains to pH3, (B) Bile salt resistance of *Lactobacillus* strains to 0.3% bile salt, (C) Adhesion ability of *Lactobacillus* strains to Caco-2 cells, (D) Surface hydrophobicity ability of *Lactobacillus* strains. All data are expressed as mean \pm SD. Different letters indicate significant difference ($P < 0.05$).

