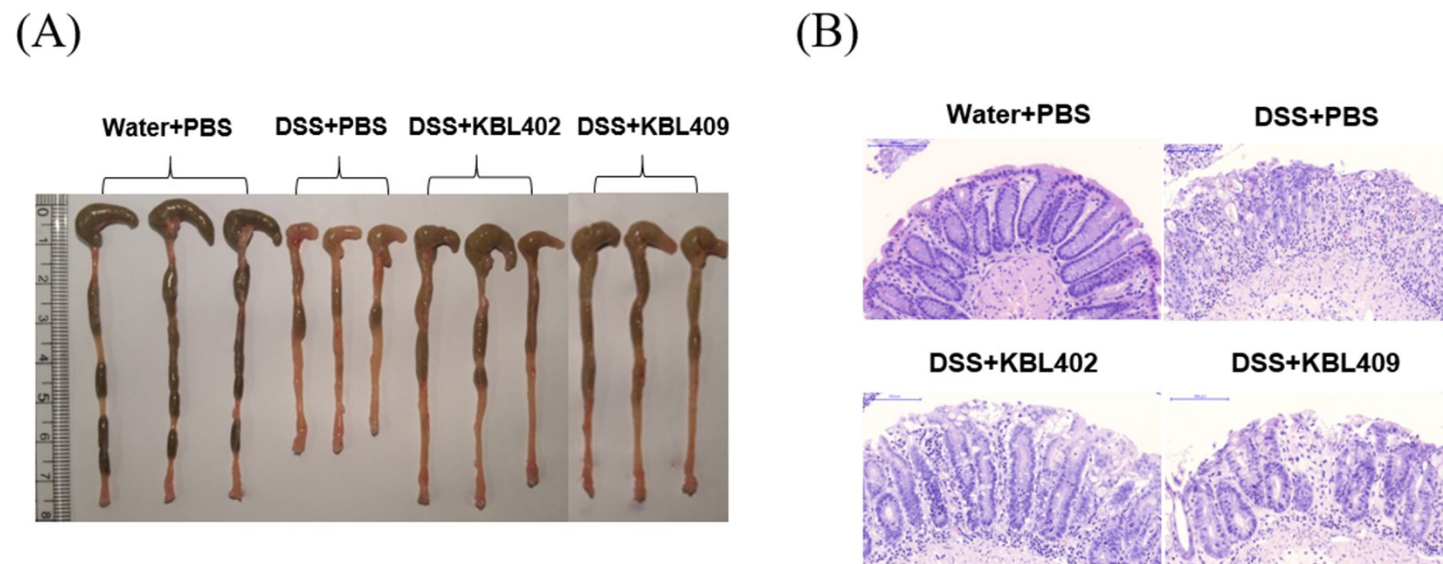


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4 **Fig. S1** Improvements in colitis symptoms using *Lactobacillus acidophilus* (*L. acidophilus*) administration. (A) Colon lengths. (D) Colon
5 histograms. Acute colitis was successfully developed in seven to eight week-old female C57BL/6J mice by administering water with 2% DSS
6 for 7 days. Then, approximately 1×10^9 colony-forming units of *L. acidophilus* KBL402 or KBL409 were orally administered daily. After 8
7 days of *L. acidophilus* treatment, all mice were sacrificed and colon lengths of mice were measured. Distal segments were fixed in 10%
8 formaldehyde and stained with hematoxylin and eosin.

9 **Table S1** Calculated disease activity index (DAI) score.

Score	Weight loss (%)	Stool consistency	Blood in feces
0	None	Normal	Negative (no bleeding)
1	1.0-5.0	-	-
2	5.0-10.0	Loose stools	Positive (slight bleeding)
3	10.0-15.0	-	-
4	Over 15.0	Watery diarrhea	Gross bleeding

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22 **Table S2** Histology scores of dextran sulfate sodium (DSS)-induced colitis.

Histological features	Score	Description
Epithelium loss (%)	0	None
	1	0.0-5.0%
	2	5.0-10.0%
	3	Over 10.0%
Crypt damage	0	None
	1	0.0-10.0%
	2	10.0-20.0%
	3	Over 20.0%
Depletion of goblet cells	0	None
	1	Mild
	2	Moderate
	3	Severe
Infiltration of inflammatory cells	0	None
	1	Mild
	2	Moderate
	3	Severe