

The anti-inflammatory effect of bovine bone collagen derived peptides in  
LPS-induced RAW264.7 cells and dextran sulfate sodium-induced  
C57BL/6 mice

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**Table S1 The composition of peptides in GP**

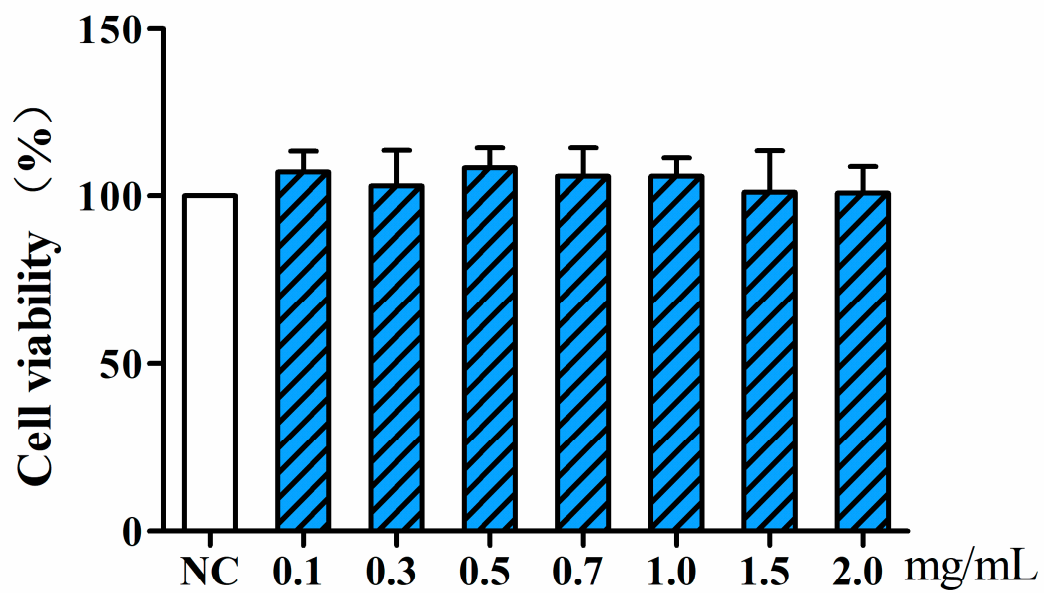
Shown in the EXCLE

**Table S2 Primer sequences used in RT-PCR assay**

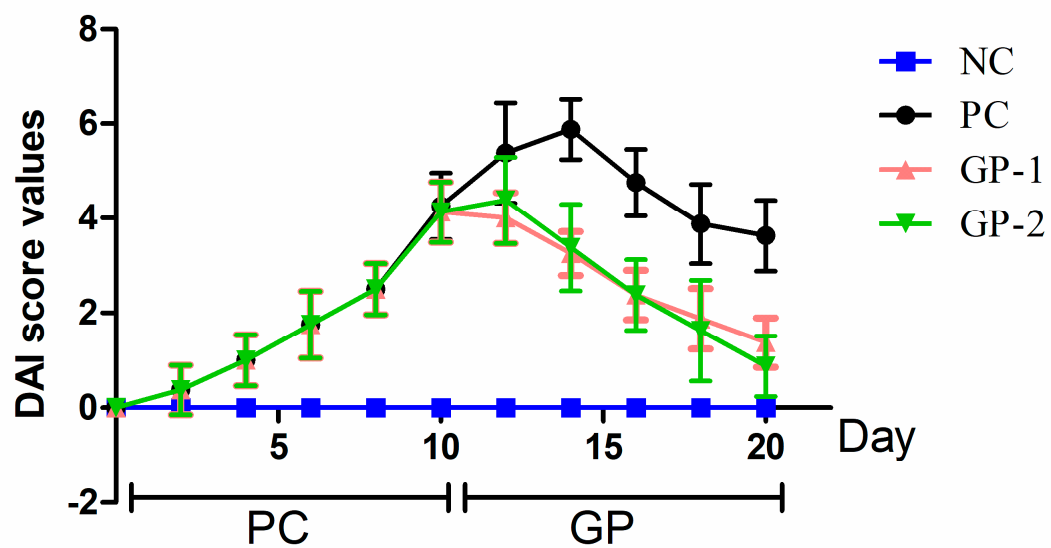
Gene	Forward primer (5'-3')	Reverse primer (5'-3')
GAPDH	ATCACTGCCACCCAGAAG	TCCACGACGGACACATTG
TNF- $\alpha$	CATCTTCTCAAAATTCGAGTGACAA	TGGGAGTAGACAAGGTACAACCC
IL-1 $\beta$	TCAAATCTCGCAGCAGCACATC-3'	CCAGCAGGTTATCATCATCATCCC
COX-2	CCCATTAGCAGCCAGTTGTC	CAGGATGCAGTGCTGAGTTC
MCP-1	AACTGCATCTGCCCTAAGGT	CTGTCACACTGGTCACTCCT
TLR-4	GCTCTCAGCCATCCACAAAG	GAGTCGGGAAGAGGAAGAGG
ZO-1	TGAGTGCGTTTCTCTCCCTT	CCCTCTGTGTTCTCATGGT
Occludin	AGCACTTAACCTGCCTGGAT	AGCCTGTGGAAGCAAGAGAT

**Table S3.** The scoring criteria for histopathological values

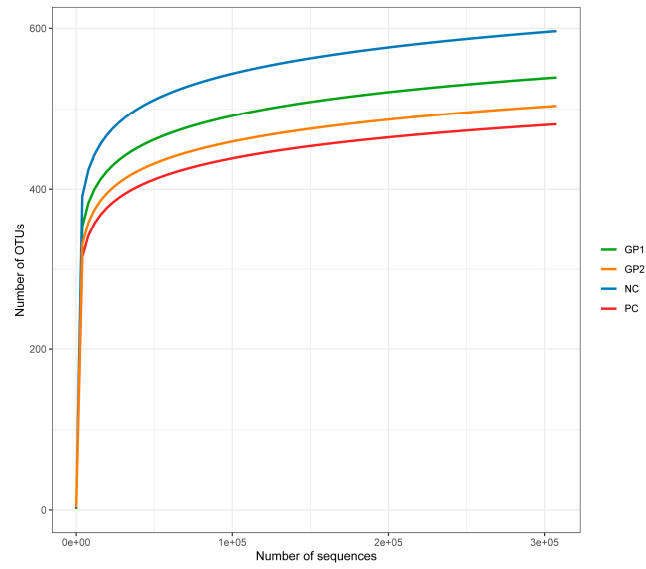
Score	Inflammation	Crypt damage	Ulceration	Edema
0	No infiltrate	None	None	None
1	Occasional cell limited to submucosa	Some crypt damage, spaces between crypts	Small, focal ulcers	Absent
2	Significant presence of inflammatory cells in submucosa, limited to focal areas	Larger spaces between crypts, loss of goblet cells, some shortening of crypts	Frequent small ulcers	Present
3	Infiltrate present in both submucosa and lamina propria, limited to focal areas	Large areas without crypts, surrounded by normal crypts	Large areas lacking surface epithelium	
4	Large amount of infiltrate in submucosa, lamina propria and surrounding blood vessels, covering large areas of mucosa	No crypts		
5	Transmural inflammation (mucosa to muscularis)			



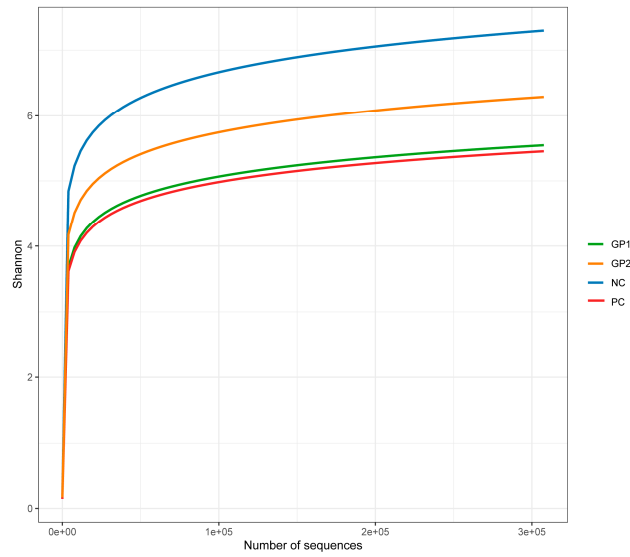
**Figure S1.** Effects of the GP in RAW264.7 cell viability.



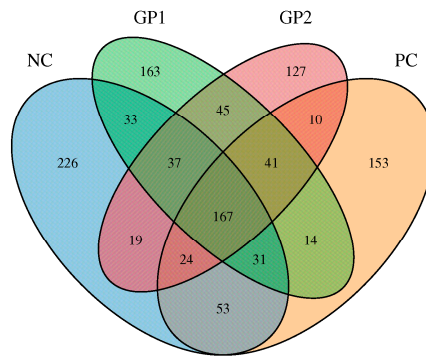
**Figure S2.** The DAI scores of mice in different groups.



(A)

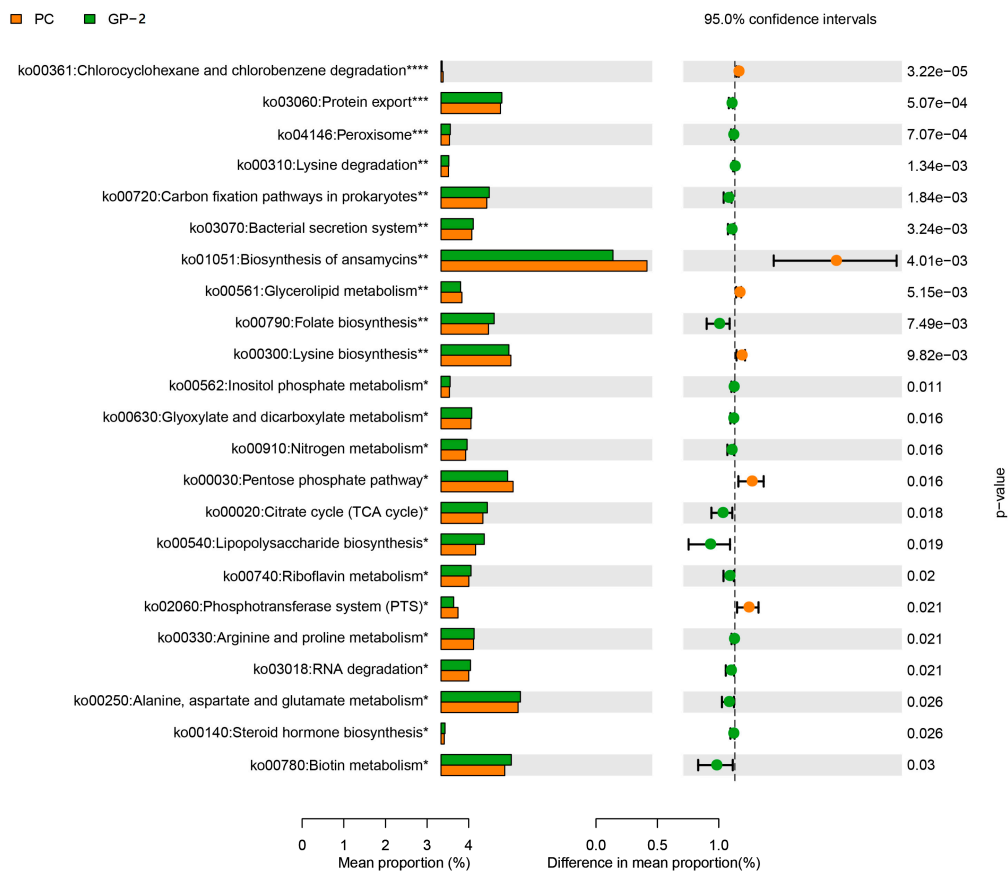


(B)



(C)

**Figure S3.** The OTU numbers (A), Shannon Rarefaction curves (B) and Venn diagram of OTU(C)



**Figure. S4.** Predicted and functions annotation was performed by PICRUSt. The supplement of GP-2 (300 mg/kg/day) on predicted functions in DSS-treated mice.