

***Staphylea bumalda* alleviates dextran sulfate sodium-induced ulcerative colitis in mice by regulating inflammatory cytokines, oxidative stress, and maintaining gut homeostasis**

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**Supplement Table Captions**

**Table S1** Methodology verification of four main components in SBE

Compound	Calibration curve	R <sup>2</sup>	RSD (%)		
			precision	stability	repeatability
rutin	y = 0.1646x + 0.006	0.9999	0.19	2.44	0.70
hyperoside	y = 0.207x - 0.0404	0.9998	0.04	0.75	0.20
kaempferol-3-O-rutinoside	y = 0.039x + 0.0061	0.9999	0.05	4.47	3.39
isorhoifolin	y = 0.0824x + 0.0236	0.9999	0.09	4.01	1.49

**Table S2** DAI scoring criteria

score	Weight loss rate	fecal viscosity	Fecal occult blood
0	Normal	Normal	No change
1	1% ~ 5%	The feces are loose and soft	Light blue color in 1-3 minutes
2	5% ~ 10%	Fecal sticky tail	Gradually turning blue from 0-60s
3	10% ~ 15%	Hematochezia	Immediately turn blue
4	>15%	Bloodstained tail	Immediately turn deep blue

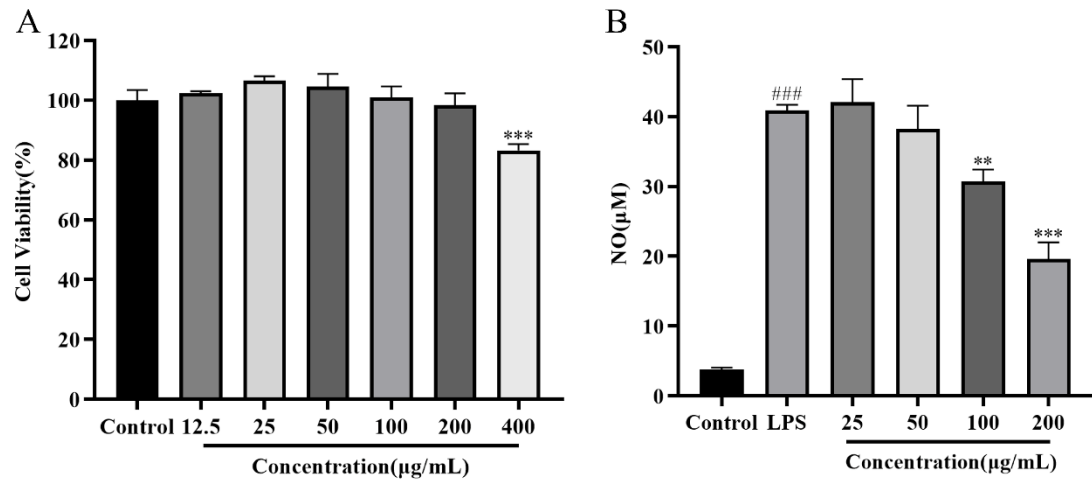
**Table S3** Histological scoring criteria related to colon inflammation

Score	Severity of inflammation	Degree of crypt loss	Degree of ulcer
0	Normal	Normal	Normal
1	Slight inflammatory cell infiltration	1/3 crypt loss	1-2 ulcer lesions
2	Inflammatory cells extend into the submucosa	2/3 crypt loss	3-4 ulcer lesions
3	Inflammatory infiltration extends across the wall	The entire crypt is lost	Widespread ulcer

**Table S4** Primer sequences for quantitative real-time PCR reactions

Gene	Forward (5'-3')	Reverse (5'-3')
<i>IL-1<math>\beta</math></i>	GCAACTGTTCTGAACTCAACT	ATCTTTTGGGGTCCGTCAACT
<i>IL-6</i>	CCAAGAGGTGAGTGCTTCCC	CTGTTGTTTCAGACTCTCTCCCT
<i>TNF-<math>\alpha</math></i>	CCCTCACACTCAGATCATCTTCT	GCTACGACGTGGGCTACAG
<i>TLR4</i>	GCTTGAATCCCTGCATAGAGGTAG	CTTCAAGGGGTTGAAGCTCAGAT
<i>NF-<math>\kappa</math>B</i>	TGGGAAACCGTATGAGCCTG	ATCCCGGAGTTCATCTCATAGT
<i><math>\beta</math>-actin</i>	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT

## Supplement Figure Captions



**Figure S1.** Cytotoxicity experiments of SBE and anti-inflammatory effects *in vitro*. (A) Effects of different concentrations of SBE on RAW 264.7 cells viability; (B) Inhibition of NO production induced by LPS. ###,  $p < 0.001$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ .