

Table S1 Criteria for scoring of histopathological damage

Parameters	Score	Description
Inflammation	0	Normal
	1	Mild
	2	Moderate
	3	Severe
Crypt damage hydrolysate	0	Normal
Positive control	1	Basal 1/3 damaged
	2	Basal 2/3 damaged
	3	Only surface epithelium intact
	4	All damage
Extent of lesion	0	<1%
	1	1-25%
	2	26-50%
	3	51-75%
	4	76-100%
Cupped cell deficiency	0	Normal
	1	Mild
	2	Moderate
	3	Severe
Inflammatory cell infiltration into the mucosa	0	Normal
	1	Mucosa
	2	Submucosa and mucosa
	3	Mucosa penetrated

Table S2 Characterization of SOD and L-SOD.

	Encapsulation efficiency (%)	Particle size (nm)	Polydispersity index	Enzyme activity retention rate (%)
SOD	/	9.19±0.23 ^a	0.662±0.033 ^a	0.72±0.04 ^a
L-SOD	40.38±2.53%	252.30±1.73 ^b	0.240±0.016 ^b	26.81±1.12 ^b
BL	/	232.30±1.76 ^c	0.289±0.015 ^c	/

Different letters imply statistically significant differences at the level of P < 0.05.