

Supporting Information

Construction of chlorogenic acid nanoparticles for effective alleviation of ulcerative colitis

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Supporting Figures

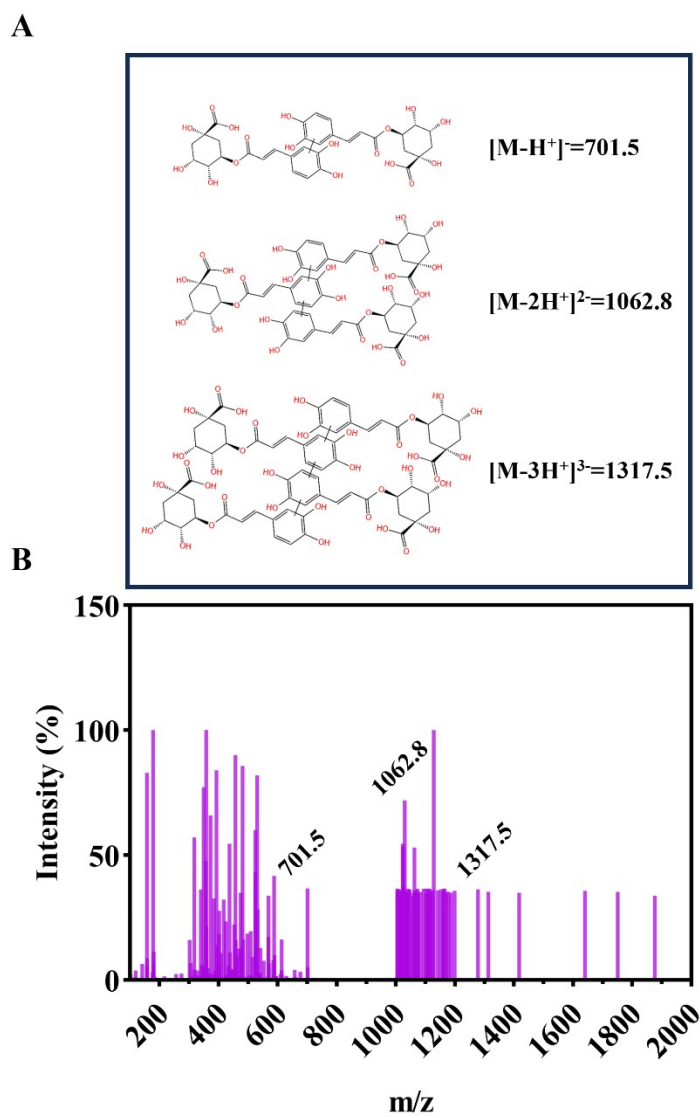


Figure S1. Prediction of CA NPs structure. (A-B) The ESI-MS spectrum and possible oligomers assigned to specific peaks.

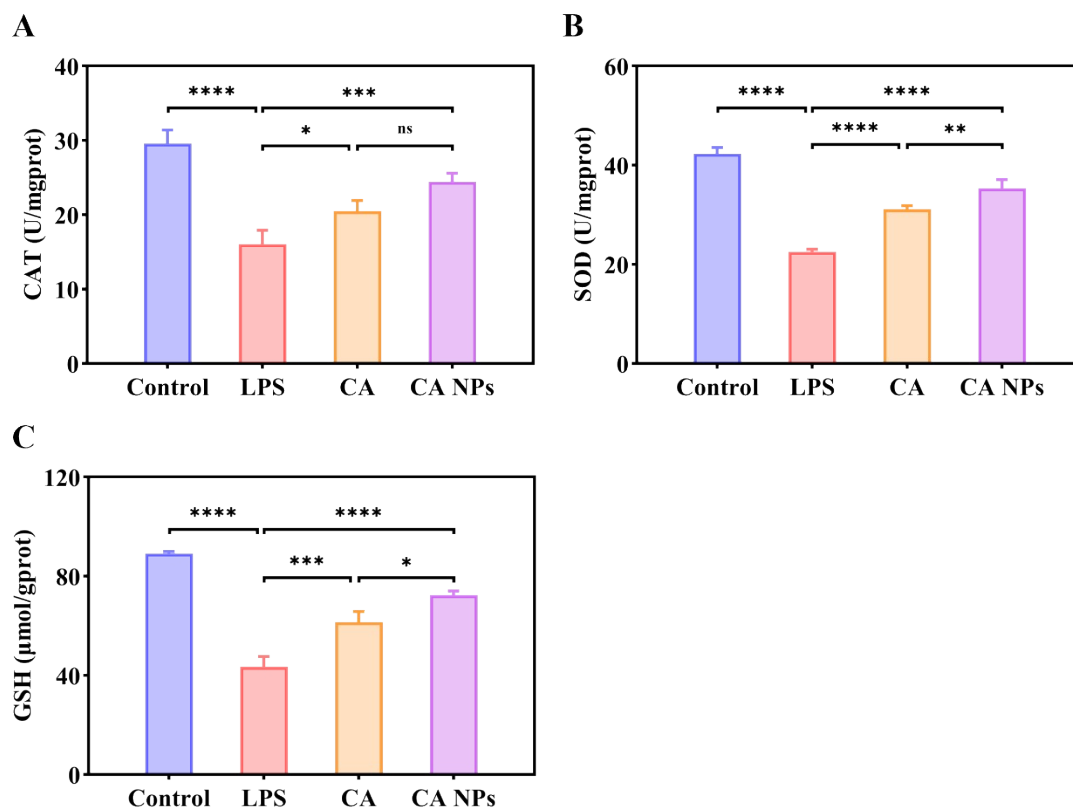


Figure S2. The levels of (A) CAT, (B) SOD, (C) GSH in Caco-2 cells treated with CA and CA NPs. Values are expressed as mean \pm SD (n=3). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

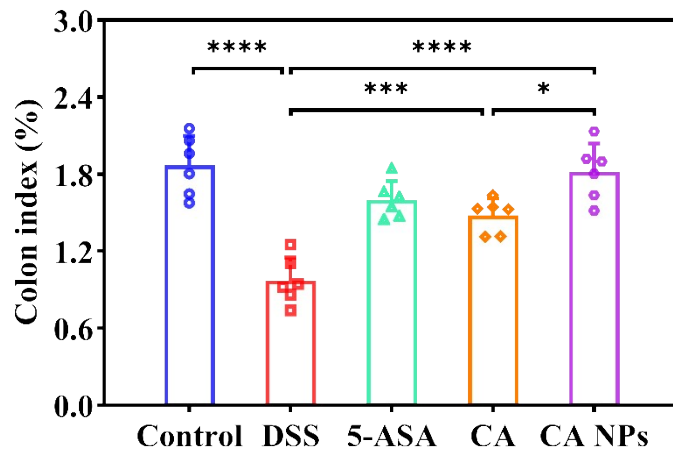


Figure S3. Colon index UC mice treated with different samples. Values are expressed as mean \pm SD (n=6). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

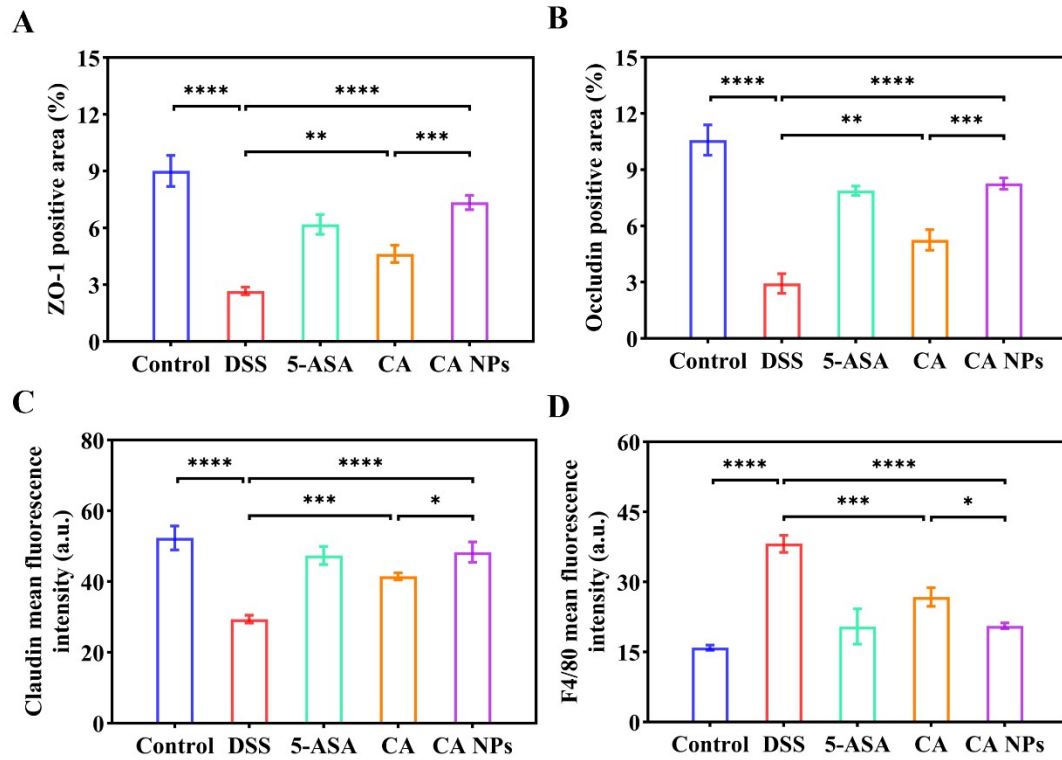


Figure S4. Expression level of (A) ZO-1 and (B) Occludin in colons after different treatments. Mean fluorescence intensity of (C) Claudin and (D) F4/80. Values are expressed as mean \pm SD (n=3). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

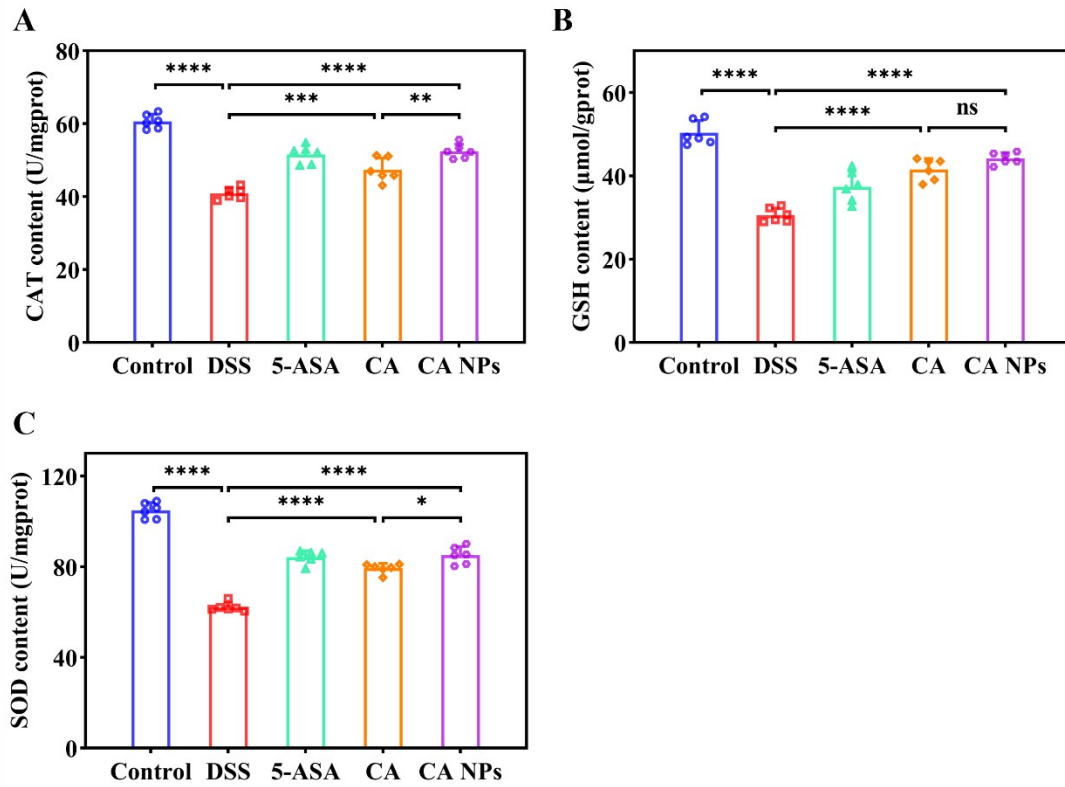
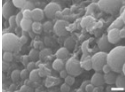
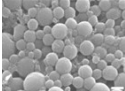
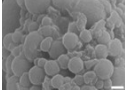
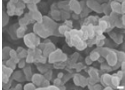


Figure S5. The content of (A) catalase (CAT), (B) glutathione (GSH), (C) superoxide dismutase (SOD) in colon tissue of colitis mice determined by the corresponding assay kits. Values are expressed as mean \pm SD (n=6). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

Supporting Tables

Table S1. Experimental conditions and physical parameters of CA NPs-*i* (*i*=1-4)

fabrication. Scale bar: 100 nm.

Sample number	CA (mg/mL)	HRP (mg/mL)	H ₂ O ₂ (mg/mL)	SEM	Size (nm)	Zeta (mV)
CA NPs-1	1	0.025	0.095		88.86 ± 9.59	-31.49 ± 1.77
CA NPs-2	1	0.050	0.190		106.65 ± 4.12	-36.37 ± 1.23
CA NPs-3	1	0.100	0.380		162.89 ± 9.78	-33.55 ± 1.05
CA NPs-4	1	0.200	0.760		217.41 ± 5.63	-28.28 ± 0.95