

Oral Nanozyme-Engineered Probiotics for the Treatment of Ulcerative Colitis

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Supplementary Tables and figures

Table S1 Scoring system of histologic score

Score ^a	Tissue damages	Lamina propria inflammatory cell infiltration
0	None	infrequent
1	Isolated focal epithelial damage	Increased, some neutrophils
2	Mucosal erosions and ulcerations	Submucosal presence of inflammatory cell clusters
3	Extensive damage deep into the bowel wall	Transmural cell infiltrations

^a The sum of the two subcores results in a combined score ranging from 0 (no changes) to 6 (wide-spread cellular infiltrations and extensive tissue damage).

Table S2 Sequences of primers used for qRT-PCR

Genes	Primers
TNF- α	F: CCCTCACACTCACAAACCAC
	R: ACAAGGTACAACCCATCGGC
IL-1 β	F: GCCACCTTTTGACAGTGATGAG
	R: ATGTGCTGCTGCGAGATTTG
IL-6	F: GAGGATACCACTCCCAACAGACC
	R: AAGTGCATCATCGTTGTTCATACA
MCP-1	F: CCAATGAGTAGGCTGGAGA
	R: TCCTTCTTGGGGTCAGCACAGAC
iNOS	F: GGGCTGACCTGTTTCCTACT
	R: GGAGGTTGAGACCCAATGGA
<i>OCN</i>	F: TTGAAAGTCCACCTCCTTACAGA
	R: CCGGATAAAAAGAGTACGCTGG
<i>TJP1</i>	F: GCTTTAGCGAACAGAAGGAGC
	R: TTCATTTTCCGAGACTTCACCA
GADPH	F: AGGTCGGTGTGAACGGATTTG
	R: TGTAGACCATGTAGTTGAGGTCA

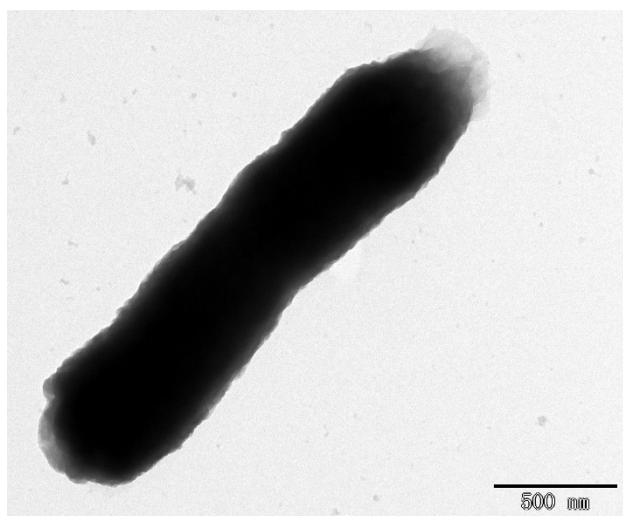


Figure S1. TEM image of ECN.

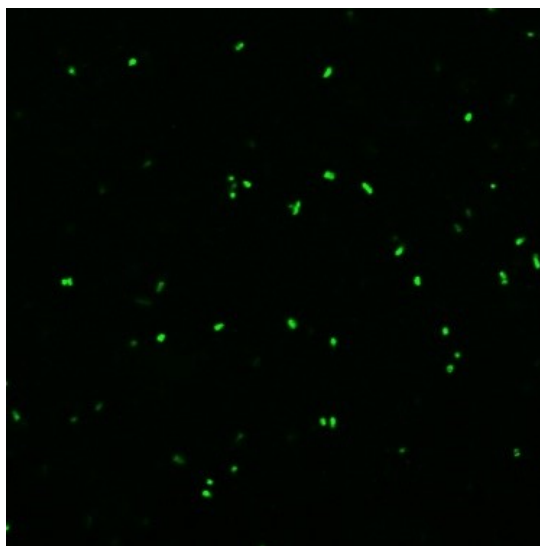


Figure S2. CLSM photo of FITC-Pt-Lipid@ECN.

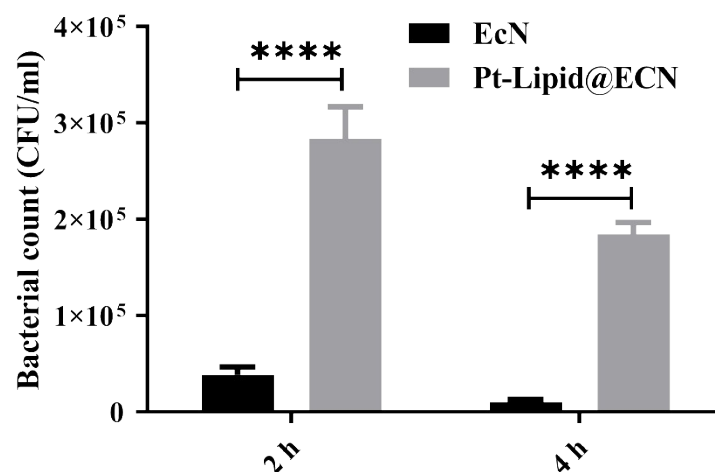


Figure S3. Resistance of Coated EcN against SGF supplemented with pepsin

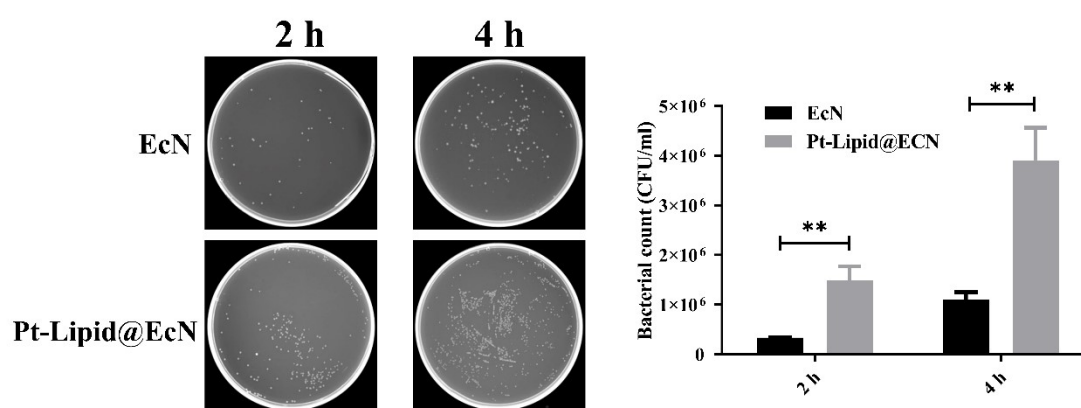


Figure S4. Resistance of Coated EcN against bile acid.

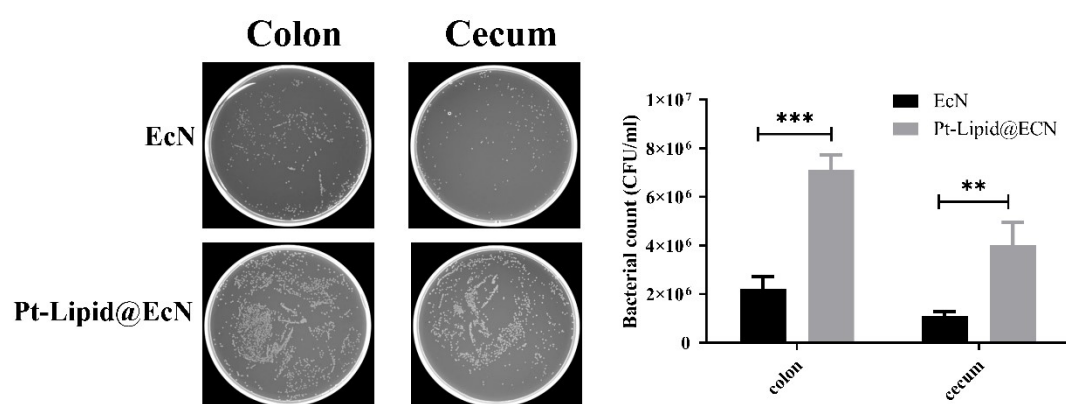


Figure S5. Overall survival rate of coated bacteria in colon and cecum.

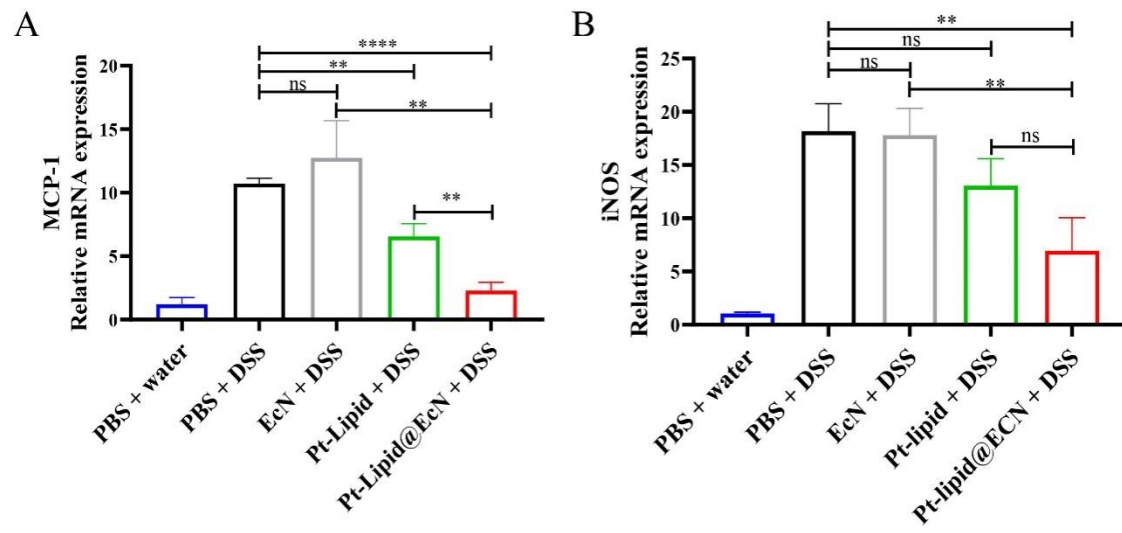


Figure S6. The mRNA expressions of inflammatory mediators MCP1 (A) and iNOS (B) in colonic tissue. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.005$, **** $P < 0.001$; Student's t-test.