Table S1. Target gene primer sequences used in the qRT-PCR experiments.

target	gene primer	sequence (5′−3′)
ZO-1	forward	ACCACCAACCCGAGAAGAC
	reverse	CAGGAGTCATGGACGCACA
Occludin	forward	TTGAAAGTCCACCTCCTTACAGA
	reverse	CCGGATAAAAAGAGTACGCTGG
IL-6	forward	TAGTCCTTCCTACCCCAATTTCC
	reverse	TTGGTCCTTAGCCACTCCTTC
IL-1β	forward	GCAACTGTTCCTGAACTCAACT
	reverse	ATCTTTTGGGGTCCGTCAACT
TNF-α	forward	GTCTACTGAACTTCGGGGTGAT
	reverse	GGCTACAGGCTTGTCACTCG
TLR4	forward	AACTTCAGTGGCTGGATT
	reverse	ACTAGGTTCGTCAGATTGG
GAPDH	forward	AGGTCGGTGTGAACGGATTTG
	reverse	TGTAGACCATGTAGTTGAGGTCA

Figure S1 CK alleviates systemic and gut inflammation in MCI mice. (A) Quantitative results of fluorescence intensity of ZO-1 ($n = 3$). $^{***}P < 0.001$ versus the model group.

Figure S2 The effect of gut microbiota on the MCI in CK treatment. (A) Quantification results of surviving neurons in Nissl-stained tissue ($n = 3$). $^{***}P < 0.001$ versus the CK group. n.s.: Not significant.

Figure S3 CK ameliorates MCI by inhibiting TLR4/MyD88/NF-κB signal pathway. (A)-(B) RT-qPCR results of TLR4 expression in hippocampus and colon ($n = 6$). $^{***}P < 0.001$ versus the model group.
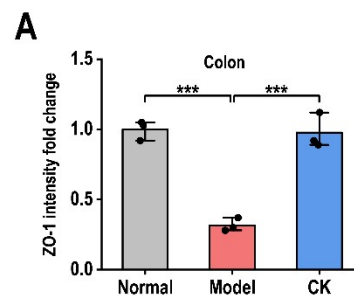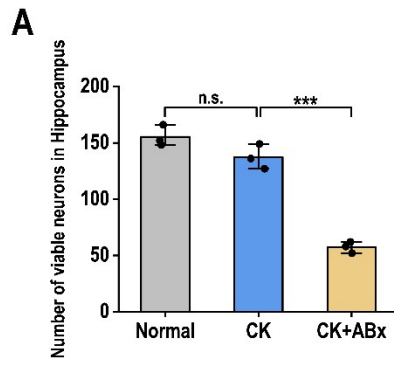
Figure S1

A

Colon

ZO-1 intensity fold change

*** ***

Normal   Model   CK

Figure S2

A

Figure S3