

**Table S1: Animal disease activity index (DAI) score sheet.**

Percentage of weight loss		Stool shape		Stool bleeding	
Unchanged weight	0	Normal	0	Normal	0
1-5%	1	Loose stool	2	Occult blood	2
5-10%	2	Watery stool	4	Overt bleeding	4
10-15%	3				
>15%	4				

**Table S2: Mouse colon tissue injury score sheet.**

Histological changes in colon	Score
Normal histology	0
Histological damage is limited to endothelial cells, mild inflammatory cell infiltration	1
Focal ulcer changes, tissue structure destruction is limited to the mucosal layer, abnormal intestinal wall glandular structure, mild inflammatory cell infiltration	2
Focal, transmural ulcers and inflammation, mild to moderate inflammatory cell infiltration	3
Large transmural ulcers and inflammation, moderate inflammatory cell infiltration	4
Large ulcers and inflammation, lesions infiltrate from mucosa to serous membrane, severe inflammatory cell infiltration	5

**Table S3: Primer sequences used for the real-time PCR analysis.**

Gene name	Primer (5'-3')	Temperature (°C)
AMPK	F: TCTGAGGGGCACCAAGAAAC R: GTGGGTGTTGACGGAGAAGAG	60
ULK1	F: AAGTTCGAGTTCTCTCGCAAG R: CGATGTTTTTCGTGCTTTAGTTCC	60
LYZ1	F: GAGACCGAAGCACCGACTATG R: CGGTTTTTGACATTGTGTTCGC	60
DEFA1	F: TGTAGAAAAGGAGGCTGCAATAG R: AGAACAAAAGTCGTCCTGAGC	60
CTSB	F: TCCTTGATCCTTCTTTCTTGCC R: ACAGTGCCACACAGCTTCTTC	60
CTSD	F: GCTTCCGGTCTTTGACAACCT R: CACCAAGCATTAGTTCTCCTCC	60
CTSL	F: GGGCTTTGTGAACGTCCAATC R: CTGGAACGACTTGTGTTTAGTGT	60
DEFA5	F: CAGAGCAGCTACTAAGCGACT R: AAAAGGGGAGATTCGGACAGA	60
CAMP	F: ATCCCGTACCACAAGCTCG R: GGATGTGTAGGTGCTTCACTG	60
MTOR	F: TCCCCGGAACGAGGAACTC R: TTCGCTCCACAGCCCATTTTC	60
LC3B	F: GAAGGCACCCCATTTGGGTT R: AATCTCTGCATCTTCGGCTGA	60
GAPDH	F: TGGATTTGGACGCATTGGTC R: TTTGCACTGGTACGTGTTGAT	60