

Table.S1 Criteria for the scoring of colonic damage

Score	Criteria
0	No damage
1	Hyperaemia; no ulcers
2	Hyperaemia, hydroncus; no ulcers
3	Hyperaemia, hydroncus; One ulcer without thickening of the bowel wall
4	Two or more sites of ulceration/inflammation
5	Two or more major sites of ulceration and inflammation or one site of ulceration/inflammation extended > 1 cm along the length of the bowel wall

Table.S2 Statistics on the number of metabolites in the differential metabolite set

Mode	Total number	M-CK	M-L-MRPs	M-H-MRPs
pos	374	139	82	132
neg	242	93	43	78
up	277	77	40	160
down	290	155	85	50

Table.S3 The 20 KEGG pathways enriched in M-L-MRPs sets

No.	Pathway Description	P value	Pathway_ID
1	Secondary bile acid biosynthesis	0.0001	map00121
2	Bile secretion	0.0001	map04976
3	Primary bile acid biosynthesis	0.0007	map00120
4	Biosynthesis of various secondary metabolites	0.0088	map00997
5	Cholesterol metabolism	0.0103	map04979
6	Biosynthesis of siderophore group nonribosomal peptides	0.0617	map01053
7	Pyrimidine metabolism	0.1411	map00240
8	Biosynthesis of alkaloids derived from ornithine, lysine and nicotinic acid	0.1411	map01066
9	Pentose and glucuronate interconversions	0.1746	map00040
10	Glucagon signaling pathway	0.1746	map04922
11	Biosynthesis of terpenoids and steroids	0.1746	map01062
12	Ascorbate and aldarate metabolism	0.2262	map00053
13	Citrate cycle (TCA cycle)	0.2262	map00020
14	beta-Alanine metabolism	0.2262	map00410
15	Pantothenate and CoA biosynthesis	0.2262	map00770
16	Biosynthesis of alkaloids derived from terpenoid and polyketide	0.2262	map01064
17	Carbon fixation pathways in prokaryotes	0.2747	map00720
18	Phosphotransferase system (PTS)	0.2747	map02060
19	Taurine and hypotaurine metabolism	0.2747	map00430
20	Biosynthesis of alkaloids	0.3205	map01065

Note: Arranged according to P value

Table.S4 The 20 KEGG pathways enriched in M-H-MRPs sets

No.	Pathway Description	P value	Pathway_ID
1	ABC transporters	0.0001	map02010
2	Pyrimidine metabolism	0.0008	map00240
3	Protein digestion and absorption	0.0079	map04974
4	Arginine and proline metabolism	0.0209	map00330
5	Cholesterol metabolism	0.0286	map04979
6	Prodigiosin biosynthesis	0.0509	map00333
7	Caffeine metabolism	0.0619	map00232
8	Arginine biosynthesis	0.0646	map00220
9	Retinol metabolism	0.0701	map00830
10	Carbohydrate digestion and absorption	0.0755	map04973
11	Mineral absorption	0.0808	map04978
12	Pantothenate and CoA biosynthesis	0.0835	map00770
13	Carbapenem biosynthesis	0.0888	map00332
14	Novobiocin biosynthesis	0.0888	map00401
15	Pyruvate metabolism	0.0888	map00620
16	beta-Alanine metabolism	0.0888	map00410
17	Biosynthesis of alkaloids	0.0968	map01065
18	Pentose phosphate pathway	0.0968	map00030
19	Secondary bile acid biosynthesis	0.0994	map00121
20	Central carbon metabolism in cancer	0.102	map05230

Note: Arranged according to P value.