

S2Table Similarity percentages (SIMPER) analysis between the stomachs/jejuna and large intestine/jejuna the bacterial communities in the *Capra hircus* GITs.

Ru/Je					
Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean Ru	Mean Je
Romboutsia	12.3	15.7	15.7	0.0	24.6
Prevotella	11.3	14.4	30.2	23.0	0.4
WCHB1-41_ge	5.7	7.3	37.4	1.7	13.1
Rikenellaceae_RC9_gut_group	3.9	5.0	42.4	7.9	0.0
OA/Je					
Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean OA	Mean Je
Romboutsia	12.3	15.6	15.6	0.0	24.6
Prevotella	10.5	13.3	29.0	21.4	0.4
WCHB1-41_ge	5.7	7.3	36.2	1.7	13.1
Rikenellaceae_RC9_gut_group	3.9	5.0	41.2	7.9	0.0
Ce/Je					
Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean Ce	Mean Je
Romboutsia	12.1	14.1	14.1	0.4	24.6
WCHB1-41_ge	6.3	7.3	21.4	0.6	13.1
Rikenellaceae_RC9_gut_group	4.0	4.7	26.1	8.1	0.0
Bacteroides	4.0	4.7	30.7	8.1	0.0
Co/Je					
Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean Co	Mean Je
Romboutsia	12.3	14.4	14.4	0.1	24.6
WCHB1-41_ge	6.4	7.5	21.8	0.3	13.1
Rikenellaceae_RC9_gut_group	4.3	5.0	26.9	8.6	0.0
Bacteroides	3.6	4.3	31.1	7.3	0.0
Ru/Ce					
Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean Ru	Mean Ce
Prevotella	11.0	16.2	16.2	23.0	1.0
Bacteroides	4.0	5.9	22.1	0.0	8.1

UCG-010_ge	3.1	4.5	26.6	1.5	7.7
UCG-005	2.7	4.0	30.6	0.6	6.1

Ru/Co

Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean Ru	Mean Co
Prevotella	11.0	16.8	16.8	23.0	1.0
Bacteroides	3.7	5.6	22.4	0.0	7.3
Alistipes	3.0	4.5	26.9	0.0	5.9
UCG-005	2.2	3.4	30.3	0.6	5.1

OA/Ce

Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean AO	Mean Ce
Prevotella	10.2	15.0	15.0	21.4	1.0
Bacteroides	4.0	5.9	20.9	0.0	8.1
UCG-010_ge	3.1	4.6	25.5	1.4	7.7
Alistipes	2.5	3.7	29.3	0.0	5.1

OA/Co

Taxon	Avg	Contrib. (%)	Cumul. (%)	Mean AO	Mean Co
Prevotella	10.2	15.6	15.6	21.4	1.0
Bacteroides	3.7	5.6	21.2	0.0	7.3
Alistipes	3.0	4.5	25.7	0.0	5.9
Muribaculaceae_ge	2.5	3.8	29.5	5.1	0.1

Avg: average dissimilarity; Contrib. (%): percent contributed; Cumul. (%): cumulative percentage; Ru: rumen; OA: omasum + abomasum; Je: jejunum; Ce: cecum; Co: colon. Bold indicates the relative percentage of the bacterial genera that contributed most to the observed dissimilarity between samples.