

Table S4. The relative abundance (%) of annotated functional family domains of carbohydrate-active enzymes (CAZymes) for the two novel strains and closely related type strains in the genus *Bacteroides*.

Strains: 1, KFT8^T; 2, *B. facilis* NSJ-77^T; 3, *B. ovatus* ATCC 8483^T; 4, *B. xylanisolvens* XB1A^T; 5, CG01^T; 6, *B. nordii* JCM 12987^T; 7, *B. salyersiae* DSM 18765^T

Family domains (%)	1	2	3	4	5	6	7
Glycoside hydrolase (GH)	60.2	63.7	64.2	59.2	60.5	56.5	56.4
Glycosyl transferase (GT)	16.6	12.4	12.7	21.2	16.9	22.3	21.8
Carbohydrate-binding module (CBM)	9.4	8.1	8.9	6.8	7.2	6.6	9.2
Carbohydrate esterase (CE)	7.6	8.0	7.6	7.5	6.1	6.6	6.7
Polysaccharide lyase (PL)	6.2	7.8	6.6	5.3	9.3	7.9	5.9
Total	100	100	100	100	100	100	100