

**Table S3:** Genes of the *B. adolescentis* core genome sequences involved in the breakdown of carbohydrates

ORFs name			Family	Product
<i>B. adolescentis</i> ATCC15703	<i>B. dentium</i> Bd1	<i>B. pseudocatenulatum</i> DSM20438		
BAD_0156	BDP_0949	BIFPSEUDO_03150	GH1	beta-glucosidase
BAD_1529	BDP_2104	BIFPSEUDO_02879	GH127	Putative glycosyl hydrolase
BAD_0667	BDP_0893	BIFPSEUDO_03470	GH13	glycogen branching enzyme
BAD_0683	BDP_0994	BIFPSEUDO_03491	GH13	glycogen operon protein GlgX
BAD_0707	BDP_1029	BIFPSEUDO_03536	GH13	putative alpha-amylase
BAD_1435	BDP_1968	BIFPSEUDO_04210	GH13	glycanase/glycogenase
BAD_1534	BDP_2112	BIFPSEUDO_04313	GH2	glycosyl hydrolase
BAD_1350	BDP_1814	BIFPSEUDO_03324	GH23	Putative glycosyl hydrolase
BAD_1614	BDP_2262	BIFPSEUDO_03971	GH23	Putative glycosyl hydrolase
BAD_1194	BDP_1657	BIFPSEUDO_03128	GH3	putative beta-glucosidase
BAD_1197	BDP_1671	BIFPSEUDO_03132	GH3	beta-D-glucosideglucohydrolase
BAD_1611	BDP_2254	BIFPSEUDO_03966	GH3	beta-glucosidase-related glycosidase
BAD_1599	BDP_2158	BIFPSEUDO_03305	GH31	alpha-xylosidase
BAD_1150	BDP_1603	BIFPSEUDO_03078	GH32	beta-fructofuranosidase
BAD_0452	BDP_0624	BIFPSEUDO_02708	GH42	alpha-1,4-glucosidase
BAD_0428	BDP_0562	BIFPSEUDO_02470	GH43	beta-1,4-xylosidase
BAD_1527	BDP_2094	BIFPSEUDO_04184	GH43	endo-1,4-beta-xylanase
BAD_1202	BDP_1679	BIFPSEUDO_03138	GH5	beta-1,3-exoglucanase
BAD_1524	BDP_2091	BIFPSEUDO_04275	GH51	alpha-arabinofuranosidase I
BAD_0308	BDP_0418	BIFPSEUDO_02640	GH77	4-alpha-glucanotransferase
BAD_0109	BDP_0185	BIFPSEUDO_02896	GT2	glycosyltransferase
BAD_0404	BDP_0541	BIFPSEUDO_02515	GT2	glycosyltransferase
BAD_0406	BDP_0543	BIFPSEUDO_02513	GT2	hypothetical protein
BAD_0660	BDP_0886	BIFPSEUDO_03462	GT2	hypothetical protein
BAD_0958	BDP_2041	BIFPSEUDO_03856	GT2	glycosyltransferase
BAD_1101	BDP_1542	BIFPSEUDO_03014	GT28	glycosyltransferase GT28
BAD_0751	BDP_1081	BIFPSEUDO_03596	GT4	glycosyltransferase
BAD_0157	BDP_0244	BIFPSEUDO_02837	GT51	glycosyl transferase family protein
BAD_1336	BDP_1801	BIFPSEUDO_03339	GT51	glycosyl transferase family 51

BAD_0426	BDP_0566	BIFPSEUDO_02472	(MalEFGK (3.A.1.1.7))	putative binding protein-dependent transporter
BAD_1288	BDP_2196	BIFPSEUDO_03304	(AraNPQMsmX (3.A.1.1.34))	sugar ABC transporter
BAD_1566	BDP_0565	BIFPSEUDO_02473	(MalK (3.A.1.1.27))	ABC transporter solute-binding protein

Genes predicted to encode carbohydrate transporters are highlighted in gray