

Table S1. *B. thetaioaomicron* genes with altered expression *in vitro* during growth on plant and host glycans or *in vivo* in mono-associated gnotobiotic mice fed a plant glycan rich diet

Genes are separated according to the Venn diagram sectors delineated in Figure S1. Values shown are the mean fold differences compared to expression during growth in MM-G; only fields with values ≥ 10 -fold are shown. Upregulated gene are shown in green; downregulated genes are shown in red. Empty cells indicate a fold-change values < 10 .

Gene	Gene description	arabinan	arabino galactan	pectic galactan	homogal acturonan	rhamnogal acturonan I	rhamnogal acturonan II	pullulan	neutral O-glycans	α -mannan	chondroitin sulfate	heparin	hyaluronan	adult plant rich	adult simple sugar	suckling
Upregulated:																
Sector 1																
BT0292	hypothetical protein													15.4		42.0
BT0294	hypothetical protein													94.1	176.2	43.7
BT0317	susC-like													116.3	223.3	39.0
BT0318	susD-like													18.7	25.0	
BT0483	susC-like													14.5	12.6	
BT0484	susD-like													11.7	15.3	48.7
BT0683	Glycoside hydrolase family 97		10.7			19.2				16.9		15.2		16.0		
BT0693	hypothetical protein													59.2	53.5	40.2
BT0722	conserved hypothetical protein, putative surface protein, function unknown													10.4		
BT0754	susC-like													13.8		
BT0763	hypothetical protein													23.9		
BT0764	hypothetical protein													18.9		
BT0765	putative protease													23.3	204.8	116.7
BT0865	Carbohydrate binding module family 32													42.5	394.7	246.9
BT0866	susD-like													21.4	282.1	145.4
BT0867	susC-like													10.1	15.1	
BT0901	putative universal stress protein UspA													19.4		
BT1008	xylanase													66.0		
BT1009	dihydroorotate dehydrogenase								74.9				14.0	139.9	232.7	457.1
BT1034	putative signal transducer								17.7					75.1	233.7	104.2
BT1047	susD-like													21.1	16.1	
BT1072	hypothetical protein													17.0	23.0	
BT1073	hypothetical protein													21.9	21.9	
BT1074	hypothetical protein													18.2	24.1	
BT1196	pyruvate carboxylase subunit B)													15.7		14.8
BT1280	susC-like								22.7				13.0	176.7	12.5	18.8
BT1283	hypothetical protein													17.2	78.5	20.9
BT1287	hypothetical protein													22.9	22.9	40.0
BT1486	hypothetical protein													41.0	33.1	59.6
BT1487	hypothetical protein													43.7	37.2	82.3
BT1488	hypothetical protein													26.2	16.8	26.1
BT1489	vitamin B12 receptor, outer membrane													16.3	13.4	
BT1492	tyrosine phenol-lyase													68.1	10.4	
BT1530	putative outer membrane protein OprM precursor													91.7		
BT1533	hypothetical protein													12.0	93.8	38.9
BT1619	susC-like													11.5	72.8	39.2
BT1653	hypothetical protein													17.1	67.5	124.6
BT1655	hypothetical protein													10.7	65.5	49.4
BT1656	putative transcriptional regulator													14.3	54.0	152.1
BT1718	putative 2-aminoethylphosphonate pyruvate aminotransferase													10.6		
BT1904	transcriptional regulator, AraC-type													31.9	60.5	57.3
BT1950	Fe3+ ABC transporter, ATP-binding protein													29.2	27.5	25.0
BT1951	Fe3+ ABC transporter, permease													48.3	68.7	51.1
BT1952	Fe3+ ABC transporter, periplasmic iron-binding protein													40.1	44.7	44.3
BT1953	putative TonB-linked outer membrane receptor													31.0	53.2	35.9
BT1954	putative surface layer protein													48.0	58.7	52.9
BT1955	putative cell wall biogenesis protein													36.0	102.3	77.0
BT1956	putative cell surface protein													21.4	24.3	
BT1973	NAD-specific glutamate dehydrogenase													12.5		11.0
BT2038	cation efflux system protein													12.9		
BT2040	hypothetical protein													16.2		
BT2087	hypothetical protein													17.2	14.2	12.4
BT2094	TonB-dependent receptor													12.6	11.9	

BT2383	RNA polymerase ECF-type sigma factor				11.3	49.7	53.2
BT2395	hypothetical protein				19.9	19.8	11.9
BT2404	L-asparaginase I				17.2	21.3	
BT2551	phosphate butyryltransferase				20.8	19.1	
BT2552	putative butyrate kinase				18.4	69.1	22.8
BT2569	RNA polymerase ECF-type sigma factor				29.3	65.7	14.9
BT2690	histidine ammonia-lyase				14.8	30.5	12.2
BT2691	methenyltetrahydrofolate cyclohydrolase				35.1	36.3	
BT2692	imidazolonepropionase				31.0	63.9	19.6
BT2693	formiminotransferase-cyclodeaminase				23.4	28.8	
BT2694	putative urocanate hydratase				10.6	13.9	
BT2762	TonB				40.3	25.4	
BT2778	RNA polymerase ECF-type sigma factor				96.0	47.3	
BT2779	3-demethylubiquinone-9 3-methyltransferase				24.5	22.4	
BT2784	hypothetical protein				13.4	16.2	
BT2785	hypothetical protein				12.8	35.6	62.1
BT2804	ribokinase				34.4		
BT2893	susD-like				14.2		
BT2894	susC-like	34.8	10.4	12.6	313.2		
BT2896	hypothetical protein				11.4		
BT2899	hypothetical protein				21.5		
BT3043	Glycoside hydrolase family 30				16.6		
BT3048	hypothetical protein				14.4		
BT3188	hypothetical protein				11.4		
BT3189	hypothetical protein				10.1		
BT3190	putative RNA polymerase ECF-type sigma factor				164.0	77.6	58.0
BT3259	hypothetical protein				18.9	37.6	
BT3436	hypothetical protein				25.1	53.4	
BT3437	hypothetical protein				27.3	138.7	
BT3438	hypothetical protein				139.3	201.8	
BT3441	hypothetical protein				18.3	16.1	
BT3475	susC-like				10.1		
BT3525	hypothetical protein				15.3		
BT3650	hypothetical protein				50.3		
BT3651	hypothetical protein				70.4		
BT3652	hypothetical protein				89.6		
BT3653	hypothetical protein				10.3		
BT3769	hypothetical protein				16.8		
BT3822	hypothetical protein				10.5		
BT3874	hypothetical protein				45.9	104.8	125.0
BT3983	susC-like				60.0	90.7	102.1
BT3984	susD-like				42.3	223.8	203.4
BT3985	hypothetical protein				102.8	243.8	270.0
BT3986	putative patatin-like protein				54.9	133.1	147.5
BT3987	Glycoside hydrolase family 18				43.3	103.9	136.4
BT3988	putative peptidoglycan bound protein				19.1	47.8	42.4
BT4038	susD-like				17.0	32.2	23.2
BT4040	Carbohydrate binding module family 32				16.3	50.4	10.4
BT4356	putative anti-sigma factor				61.8	400.8	47.4
BT4358	susD-like				14.6		18.5
BT4404	susC-like				27.1	33.1	43.0
BT4405	susD-like				18.3	12.0	16.2
BT4406	hypothetical protein				12.4	17.4	
BT4465	conserved hypothetical protein, putative outer membrane protein				30.9	13.1	
BT4647	RNA polymerase ECF-type sigma factor				17.2		
BT4649	hypothetical protein				18.5	17.7	11.4
BT4689	Glycoside hydrolase family 13				20.6		
BT4708	susD-like				25.4		
BT4709	Glycoside hydrolase family 18				18.5		
BT4710	hypothetical protein				21.1		
BT4711	hypothetical protein				13.3		11.5
BT4712	hypothetical protein						

Sector 2

BT0319	hypothetical protein									162.6	346.7	101.6
BT0348	Glycoside hydrolase family 51	41.2	12.6	25.6		31.8				18.1		
BT0349	hypothetical protein	49.2	11.6	31.3		47.6				16.0		19.1
BT0360	Glycoside hydrolase family 43	315.8		156.7						67.6		13.1
BT0361	susD-like	381.0		210.0						156.1	28.2	46.6
BT0362	susC-like	234.0		118.8						57.2		11.4
BT0365	hypothetical protein	1222.0		676.7						780.7	29.0	100.0
BT0366	hybrid two-component system (HTCS)	35.1		16.9						10.9		
BT0367	Glycoside hydrolase family 43	1723.0		944.6	12.1			12.0		200.7		16.1
BT0368	Glycoside hydrolase family 51	52.5		30.7						20.3		
BT0369	Glycoside hydrolase family 43	77.2		43.3						19.4		15.1
BT0565	putative heat shock protein									15.2	11.7	
BT0787	succinyl-CoA synthetase alpha chain									15.3	30.4	
BT0788	succinyl-CoA synthetase beta chain									11.2	35.2	
BT0978	ECF-type sigma factor			17.9		146.2	251.3			22.3		15.4
BT1029	susC-like			14.8		551.4	495.0			61.0		
BT1142	hypothetical protein		10.2							37.4	16.9	
BT1448	biotin carboxyl carrier protein									26.8	58.1	15.6
BT1449	biotin carboxylase									36.4	52.9	18.6
BT1450	propionyl-CoA carboxylase beta chain									38.6	51.1	16.8
BT1491	hypothetical protein									24.6	12.2	26.0
BT1535	ABC transporter ATP-binding protein	12.0		11.6						134.0		16.6
BT1757	fructokinase									23.1		10.5
BT1758	glucose/galactose transporter				16.9					96.9	19.2	38.9
BT1760	Glycoside hydrolase family 32				21.9					72.5	50.8	90.4
BT1761	hypothetical protein				22.9					83.0	21.9	36.1
BT1763	susC-like				13.7					42.2	14.5	24.4
BT1765	Glycoside hydrolase family 32				13.3					40.8	10.0	21.6
BT2131	hypothetical protein		10.6							19.8	278.8	273.3
BT2500	hypothetical protein									150.7	19.4	
BT3046	susC-like	22.2								43.6		
BT3047	hypothetical protein	184.1	41.8	33.6	30.2		28.8	10.8	24.3	365.2	22.0	61.0
BT3082	Glycoside hydrolase family 32									18.2		
BT3614	putative oxidoreductase					54.2	103.8			23.1		
BT3655	Glycoside hydrolase family 43		24.8							17.4		
BT3656	Glycoside hydrolase family 43		20.9							19.1		
BT3681	susD-like	88.3	619.8	58.9	20.4	11.4		13.6		33.7		
BT3699	outer membrane protein SusF								43.7	11.5		24.2
BT3700	outer membrane protein SusE								54.2	15.9	17.1	49.3
BT3702	susC , outer membrane protein involved in starch binding								29.2	11.3		17.6
BT3703	susB, Glycoside hydrolase family 97								26.4	10.9		23.1
BT3704	susA, Glycoside hydrolase family 13								77.8	11.2		16.5
BT3735	hypothetical protein									13.9		14.8
BT3764	L-rhamnose isomerase	163.7		147.7	55.0	245.6	263.4			33.8	13.4	
BT4113	susD-like			53.0	92.6	49.3	50.7			12.5	38.1	74.4
BT4114	susC-like			68.2	136.1	82.7	73.7			11.7	20.4	34.2
BT4120	hypothetical protein			61.0	187.9		148.2			36.3		
BT4121	susC-like			53.6	224.5		145.6			14.5		
BT4122	susD-like			187.5	755.4		404.4			209.1	28.7	14.4
BT4153	Glycoside hydrolase family 28	52.9		45.3	13.2	70.7	13.7			13.5		
BT4163	hypothetical protein	101.3		72.9	36.3	186.5	46.2			20.7		
BT4164	susC-like	88.2		68.0	34.0	135.7	38.3			10.6		
BT4165	susD-like	114.9		83.3	37.6	128.0	50.8			16.1		
BT4166	putative lipoprotein	69.0		48.7	29.5	92.8	29.0			10.9		
BT4167	hypothetical protein	68.6		53.3	26.3	71.3	27.1			11.4		
BT4169	susD-like	77.1		67.0	35.9	93.8	38.5			16.6		
BT4170	Polysaccharide lyase family 9	34.5		26.1	12.9	47.4	14.8			10.7		
BT4172	hypothetical protein	52.1		45.4	16.3	65.4	19.7			10.9		
BT4175	Polysaccharide lyase family 11	73.6		57.0	20.0	140.7	28.2			18.3		
BT4176	Glycoside hydrolase family 105	35.2		25.6	11.4	48.1	12.4			10.0		
BT4667	Glycoside hydrolase family 2	13.8		123.4	25.9					78.6		24.0
BT4668	Glycoside hydrolase family 53	13.7		140.7	21.4					136.6	16.9	46.9
BT4670	susD-like			104.6						72.9		14.0
BT4672	hypothetical protein	19.8		246.9	16.3					75.6		19.2

Sector 3									
BT0111	hypothetical protein								16.6
BT0112	putative permease								13.6
BT0113	hypothetical protein								10.0
BT0115	arsenate reductase								24.7
BT0116	arsenical pump-driving ATPase								14.4
BT0117	arsenical resistance operon trans-acting repressor								15.2
BT0118	putative cytochrome c biogenesis protein								27.5
BT0119	hypothetical protein								16.9
BT0120	hypothetical protein								29.3
BT0121	transcriptional regulator, ArsR family								10.6
BT0198	hypothetical protein	10.8							
BT0262	hypothetical protein								66.1
BT0263	hypothetical protein								42.0
BT0264	Glycoside hydrolase family 43								1860.0
BT0265	Glycoside hydrolase family 43								465.4
BT0266	hypothetical protein							13.1	17.4
BT0268	susC-like								72.7
BT0269	susD-like								222.6
BT0270	hypothetical protein								214.8
BT0271	hypothetical protein								121.0
BT0272	susC-like								123.1
BT0273	susD-like								130.9
BT0274	hypothetical protein								144.8
BT0275	hypothetical protein								242.6
BT0276	hypothetical protein								145.0
BT0277	hypothetical protein								133.0
BT0278	hypothetical protein								109.4
BT0279	hypothetical protein							11.3	155.3
BT0280	transposase for insertion sequence element ISRM3								11.7
BT0284	putative peptidoglycan binding protein (LPXTG motif)								17.0
BT0285	putative tolQ-type transport protein								17.2
BT0286	hypothetical protein								16.5
BT0287	putative biopolymer transmembrane protein								21.4
BT0288	hypothetical protein								22.4
BT0290	Glycoside hydrolase family 35								93.7
BT0338	hypothetical protein					76.5			33.8
BT0339	Glycoside hydrolase family 31					107.5			142.6
BT0340	trimethylamine corrinoid protein 2 (TCP 2)					42.4			68.9
								10.6	15.6
BT0341	Na ⁺ /glucose cotransporter					211.6			360.8
BT0342	hypothetical protein					47.6			143.2
BT0343	methylcobamide:CoM methyltransferase mtbA					82.1			154.5
								11.3	10.7
									10.1
BT0350	xylulose kinase (xylulokinase)	22.0		14.7					21.0
BT0352	hypothetical protein	11.7							
BT0353	putative sugar epimerase/aldolase	10.2							10.7
BT0354	hypothetical protein	12.9							14.7
BT0355	Na ⁺ /glucose cotransporter	12.9		10.2					13.7
BT0356	aldose 1-epimerase precursor	11.7		10.7					12.6
BT0363	susD-like	471.2		256.2				98.6	13.6
BT0364	susC-like	297.4		151.6				177.0	26.9
									18.4
BT0434	hypothetical protein						10.4		
BT0435	hypothetical protein						10.1		
BT0437	N-acylglucosamine 2-epimerase						10.1		
BT0438	Glycoside hydrolase family 89						14.1		11.0
BT0442	glycerophosphoryl diester phosphodiesterase						10.9		10.6
									10.0
BT0622	Na ⁺ -transporting NADH:ubiquinone oxidoreductase, Electron transport complex protein rnfA			11.2					
BT0823	uronate isomerase					20.5			
BT0824	transcriptional regulator (LacI family)			19.9		10.4			14.3

BT0854	hypothetical protein										11.3
BT0977	hypothetical protein		59.9	167.5							
BT0978	ECF-type sigma factor			251.3							
BT0979	hypothetical protein			14.1							
BT0980	Polysaccharide lyase family 1			11.5							
BT0982	hypothetical protein		20.5	62.1							
BT0983	Glycoside hydrolase family 2		14.2	24.0							
BT0984	hypothetical protein			22.9							
BT0985	putative sialic acid-specific acetyltransferase II		12.3	36.7							
BT0986	Glycoside hydrolase family 106		11.2	17.5							
BT0992	Glycoside hydrolase family 2		77.9	115.6				35.4			
BT0993	Glycoside hydrolase family 2		22.7	66.6				10.2			10.3
BT0996	Glycoside hydrolase family 2		171.1	262.3							
BT0997	hypothetical protein		47.6	63.9							
BT1001	Glycoside hydrolase family 78		24.8	64.4				36.9			
BT1002	hypothetical protein		55.8	83.7							
BT1003	hypothetical protein		35.6	56.4							
BT1010	Glycoside hydrolase family 95		68.7	147.7				15.8			
BT1011	Glycoside hydrolase family 105		140.4	210.7				16.4			
BT1012	hypothetical protein		82.6	165.1				17.1			
BT1013	Glycoside hydrolase family 78		77.0	118.0							
BT1017	hypothetical protein			28.2							
BT1018	Glycoside hydrolase family 28			24.1							
BT1019	Glycoside hydrolase family 78		13.8	33.4							
BT1020	hypothetical protein		105.8	264.8				11.4			
BT1021	Glycoside hydrolase family 43		23.0	60.0				15.5			
BT1022	hypothetical protein		25.1	36.8							
BT1023	Polysaccharide lyase family 1		31.9	49.8							
BT1026	hypothetical protein			36.4							
BT1027	hypothetical protein			22.8							
BT1028	susD-like		78.1	120.8							
BT1029	susC-like			495.0							
BT1030	hypothetical protein	13.8	676.1	457.3				14.4			
BT1031	hypothetical protein		84.5	123.1							
BT1230	hypothetical protein	19.1	25.1	77.1	11.1	15.4	50.2	15.7			
BT1415	cytochrome c biogenesis protein ccsA			11.4							
BT1417	cytochrome C552 precursor			14.4							14.1
BT1418	quinol oxidase			13.6							20.3
BT1518	hypothetical protein										15.3
BT1519	N-acetylmuramoyl-L-alanine amidase							14.1			17.8
BT1682	susD-like		182.2	115.6							13.4
BT1683	susC-like		148.2	106.8							12.1
BT1759	Glycoside hydrolase family 32		24.7				92.3	29.1			56.5
BT1762	susD-like		70.0				396.7	61.9			80.2
BT1884	cold shock protein, putative DNA-binding protein	15.2									
BT1885	putative ATP-dependent RNA helicase	10.3									
BT1903	hypothetical protein									11.9	
BT2096	putative transcriptional regulator		10.1								
BT2097	hypothetical protein	17.9	32.5			11.6					
BT2118	transporter, AcrB/D/F family		10.0							15.4	
BT2254	Polysaccharide lyase family 10		10.2	30.1							
BT2680	Glycoside hydrolase family 2	31.2	22.8	10.4	50.7	12.8					
BT2813	sodium-dependent multivitamin transporter				201.7	184.0			18.4		
BT2814	dihydrodipicolinate synthase				275.5	219.5			13.0		
BT3044	hypothetical protein	32.6							88.3		14.7
BT3045	susD-like	19.4							256.9	21.0	59.5
BT3086	Glycoside hydrolase family 31		13.9	17.4	17.0	10.3		14.5			
BT3420	hypothetical protein	133.4							10.1		
BT3421	hypothetical protein	59.6									
BT3422	hypothetical protein	54.8									
BT3423	hypothetical protein	89.6									
BT3424	hypothetical protein	58.1									
BT3425	hypothetical protein	17.9									
BT3615	hypothetical protein			87.2	121.7				34.2		10.8

BT3616	fucose permease				49.7	80.0							
BT3617	sorbitol dehydrogenase				42.2	111.0			12.6	10.9			
BT3654	Glycoside hydrolase family 35		23.7						25.1				
BT3657	Glycoside hydrolase family 51		20.9						29.6			15.0	
BT3658	hypothetical protein	28.3	74.2	10.3					43.9			12.6	
BT3662	Glycoside hydrolase family 43				13.0	21.3					29.7		
BT3665	Glycoside hydrolase family 29				11.5	23.9					28.7		
BT3669	hypothetical protein				18.5	53.1					45.6		
BT3672	hypothetical protein				75.0	123.1					65.8		
BT3674	hypothetical protein		19.7						16.4	10.8		22.6	
BT3675	Glycoside hydrolase family 43	10.3	33.1										
BT3676	hypothetical protein		33.1										
BT3677	hypothetical protein		21.5										
BT3679	conserved hypothetical protein, with a conserved domain	10.9	110.5	10.4						13.5			
BT3680	susC-like	54.6	625.5	50.6						45.3		10.4	
BT3682	hypothetical protein	33.4	170.8	19.8					77.0	22.4		44.8	
BT3683	Glycoside hydrolase family 16	12.2	83.6										
BT3685	Glycoside hydrolase family 43		12.2										
BT3686	hypothetical protein		13.9										
BT3698	alpha-amylase, susG						53.9					22.6	
BT3701	susD						33.0					12.4	
BT3747	hypothetical protein		36.6										
BT3763	rhamnulose kinase/L-fuculose kinase	497.1		523.4	184.0	602.2		827.6	11.2	28.7			
BT3765	L-rhamnose/H+ symporter	371.2		305.7	105.3	433.8		471.2		113.0	19.6		
BT3766	rhamnulose-1-phosphate aldolase	350.4		244.1	102.2	451.4		339.3		229.0	103.5	58.6	
BT3767	lactaldehyde reductase	10.5				12.9		14.8					
BT4105	hexuronate transporter		10.1	17.1		16.1		12.4					
BT4109	Carbohydrate esterase family 8		117.0	374.2	51.8	140.9	19.4	18.2	12.0				
BT4110	Carbohydrate esterase family 8		37.5	90.5	21.1	56.9					10.2	13.7	
BT4112	hypothetical protein		64.5	138.2	46.3	57.9					12.0	28.8	
BT4115	Polysaccharide lyase family 1		36.5	73.6	11.0	24.4							
BT4116	Polysaccharide lyase family 1		37.4	127.8	39.5	46.2							
BT4119	Polysaccharide lyase family 1		36.5	135.5		89.1				11.6		14.7	
BT4123	Glycoside hydrolase family 28		37.6	150.8		42.0							
BT4124	hybrid two-component system (HTCS)			24.2									
BT4145	Glycoside hydrolase family 106	14.0		13.9		20.7							
BT4146	Glycoside hydrolase family 28	21.5		17.5		29.8							
BT4147	hypothetical protein	21.2		19.1		19.2							
BT4148	hypothetical protein	22.5		18.5		34.9							
BT4149	Glycoside hydrolase family 28	46.7		38.4	16.0	64.3		20.1					
BT4150	Carbohydrate esterase family 12	37.5		33.8	15.4	73.3		13.1					
BT4151	Glycoside hydrolase family 2	242.3		219.9	91.1	568.6		75.0		26.3	17.6	23.4	
BT4152	Glycoside hydrolase family 42	212.2		151.8	44.3	178.7		60.2		33.6			
BT4154	Carbohydrate esterase family 4	22.7		17.8		16.5							
BT4155	Glycoside hydrolase family 28					11.0							
BT4156	Glycoside hydrolase family 2	10.2				10.7							
BT4158	hypothetical protein	70.2		52.7	24.8	132.5		36.6					
BT4159	hypothetical protein	24.8		23.2		88.9		19.7					
BT4160	beta-galactosidase precursor	31.7		36.3	12.4	77.6		51.2		12.7			
BT4168	susC-like	39.8		28.8	19.6	60.3		17.4					
BT4171	hypothetical protein	49.6		36.2	24.2	77.5		15.7					
BT4173	Carbohydrate esterase family 12	19.9		14.8		64.0		10.6					
BT4174	Glycoside hydrolase family 105	31.0		22.3		62.2		13.7					
BT4177	hypothetical protein	64.6		48.6	20.2	68.1		23.2					
BT4181	Glycoside hydrolase family 2	17.4											
BT4183	Polysaccharide lyase family 9	53.9		27.6	13.5	55.5		21.2					
BT4185	Glycoside hydrolase family 43			12.8	33.0			12.1					
BT4187	Glycoside hydrolase family 28			35.2	75.1	37.4		40.6					
BT4227	hypothetical protein						10.4				11.2	53.2	19.3
BT4669	hypothetical protein	130.9		881.2	140.3	24.8			13.1	12.6	404.4	34.4	144.9
BT4671	susC-like	27.5		192.0	19.2						56.2		20.2
Sector 4													
BT0506	Glycoside hydrolase family 20									18.5	11.2	34.8	52.9
BT0791	hypothetical protein								13.4		13.8		
BT1036	hypothetical protein										35.4	153.4	39.5

BT1037	hypothetical protein						54.4					50.1	202.3	29.4
BT1038	hypothetical protein						62.0					79.5	271.1	51.8
BT1039	susD-like						37.2					62.4	198.8	42.7
BT1040	susC-like						48.0					39.3	190.7	39.4
BT1042	susC-like						20.4					19.2	127.6	238.0
BT1043	susD-like						17.8					16.8	98.1	182.3
BT1044	Glycoside hydrolase family 18						20.7					22.0	161.8	275.4
BT1045	hypothetical protein						13.1					10.8	51.0	100.3
BT1046	susC-like						78.3					288.2	158.8	82.1
BT1048	Glycoside hydrolase family 18						11.5					43.2	191.2	96.1
BT1534	hypothetical protein						22.6					132.7		14.7
BT1554	alanine dehydrogenase									10.8		33.5	36.0	
BT2559	susD-like							11.9				16.2	20.5	
BT2561	putative anti-sigma factor							11.2				20.7	12.7	
BT2818	susC-like						368.2					22.6	37.5	14.8
BT2820	susC-like						4216.0					230.1	46.8	
BT2821	susD-like						433.0					32.5	87.3	16.5
BT2822	hypothetical protein						139.5					11.6	30.1	
BT2823	hypothetical protein						3671.0					206.2	508.4	81.9
BT3778	hypothetical protein							113.5				14.2	34.0	10.7
BT3790	hypothetical protein				17.0			139.3				11.5		
BT3860	hypothetical protein							21.7				36.8	16.0	
BT4294	hypothetical protein						24.3					12.1	92.9	109.8
BT4295	putative chitinase						30.8				13.5	23.9	406.3	488.3
BT4296	hypothetical protein						32.8				17.9	21.8	109.2	126.3
BT4297	susD-like						37.3				16.1	23.9	77.9	76.8
BT4298	susC-like						33.5				16.5	23.4	472.6	415.8
BT4299	hypothetical protein						38.0				19.0	20.6	126.4	176.8
BT4407	hypothetical protein						12.6					34.1	37.6	92.1
BT4648	hypothetical protein									11.8		55.3	13.4	
Sector 5														
BT1536	ABC transporter permease	33.6		32.7	16.8			11.7				207.2	45.6	15.6
BT2167	elongation factor G		15.1	11.6	20.1	12.6	10.1			37.0	11.5	79.2	186.5	101.1
BT3221	hypothetical protein			86.3		17.6						171.9		
BT3222	hypothetical protein			94.8								219.9		
BT3223	hypothetical protein			52.5								123.4		
BT3572	hypothetical protein		14.6									17.5		
BT3573	hypothetical protein		15.5									18.1	22.5	
BT3793	hypothetical protein									30.1		56.7	112.8	31.3
BT4108	Glycoside hydrolase family 105	19.1		131.6	300.3	103.2	146.7			28.2	13.6	16.2	16.7	12.9
BT4384	hypothetical protein							15.9				20.2	10.0	10.3
Sector 6														
BT0489	putative gluconate aldolase				11.7	13.7					11.2	14.0		
BT1211	hypothetical protein	10.7					10.9					12.7		
BT1572	RNA polymerase ECF-type sigma factor	31.7		51.1	58.4		54.3			54.7		52.8		
BT1604	hypothetical protein	12.2		21.4	10.4		10.6			15.9		11.7		
BT3231	4-deoxy-L-threo-5-hexosulose-uronate ketol- isomerase				10.9					13.3	19.7	15.4		
BT3571	hypothetical protein		21.7					203.9				13.2		
BT3574	hypothetical protein		17.8					75.6						
BT3575	hypothetical protein							54.7						
BT4106	4-deoxy-L-threo-5-hexosulose-uronate ketol- isomerase				12.2	21.7	11.9			15.3	23.7	35.8		
BT4107	putative phosphotransferase enzyme II, C component	10.3		12.3	14.9	14.2	14.1			30.0	26.3	38.2		
BT4393	hypothetical protein					11.5		14.9			14.7		27.8	14.7
BT4715	non-specific DNA-binding protein Dps	23.4		21.7	21.6		33.0			27.8	22.1			
Sector 7														
BT0215	iron uptake regulatory protein									10.3				
BT0459	Glycoside hydrolase family 20							11.2					22.3	15.5
BT0488	2-dehydro-3-deoxygluconokinase										11.2			
BT1049	putative patatin-like protein							20.5				83.4	269.7	119.0
BT1273	L-fucose isomerase							21.6						
BT1274	L-fuculose-1-phosphate aldolase							15.6						

BT1275	L-fucose kinase			20.3					
BT1276	hypothetical protein			25.4				14.1	17.5
BT1277	L-fucose permease			33.2				11.4	13.3
BT1532	ABC transporter permease			14.2				181.0	21.2
BT1596	putative sulfatase yidJ					11.7	40.9		
BT1626	Glycoside hydrolase family 2			12.1					
BT1627	Glycoside hydrolase family 20			20.0					
BT1628	putative sulfatase yidJ			17.2					
BT1629	hypothetical protein						15.0		18.1
BT1631	susC-like					10.7	11.7	11.4	14.3
BT2119	transmembrane protein precursor, possibly involved in transport	10.0	10.1					10.4	11.0
BT2451	putative pyrogenic exotoxin B			12.2					
BT2560	susC-like				13.8			21.3	25.0
BT2615	reverse transcriptase				50.0				
BT2617	reverse transcriptase				95.0				
BT2618	two-component system response regulator		12.7	232.3					
BT2619	two-component system sensor histidine kinase				39.8				
BT2620	Glycoside hydrolase family 97		11.3	84.4					
BT2621	hypothetical protein			75.3					
BT2622	Glycoside hydrolase family 67			78.7					
BT2623	Glycoside hydrolase family 76		18.8	168.8				14.6	20.0
BT2624	hypothetical protein		12.3	93.2					17.0
BT2625	susD-like		17.8	128.8					12.3
BT2626	susC-like		16.4	128.2					33.4
BT2627	putative cell surface protein, have conserved domain		18.7	104.7					23.2
BT2628	hybrid two-component system (HTCS)			55.7					14.9
BT2629	Glycoside hydrolase family 92		15.6	99.0					12.9
BT2630	conserved hypothetical protein with endonuclease/exonuclease/phosphatase family domain			16.6					
BT2631	Glycoside hydrolase family 76			13.1					
BT2632	hypothetical protein			15.6					
BT2633	hypothetical protein			14.3					
BT2812	alkyl hydroperoxide reductase C22 protein						10.5		
BT2819	susD-like			416.8				27.9	45.8
BT2824	Glycoside hydrolase family 16			1264.0				79.3	66.5
BT2825	Glycoside hydrolase family 18			77.7					18.6
BT2919	susD-like						20.7		10.7
BT2920	susC-like			14.5			51.8	14.4	44.0
BT3233	hypothetical protein						10.1		45.3
BT3324	Polysaccharide lyase family 8				78.5			100.3	
BT3328	hypothetical protein				57.2			71.9	
BT3329	hypothetical protein				160.8			456.4	
BT3330	hypothetical protein				184.7			433.3	
BT3331	susD-like				94.6			171.3	
BT3332	susC-like				120.6			314.6	
BT3333	arylsulfatase A precursor (ASA)				115.2			55.7	
BT3348	Glycoside hydrolase family 88				28.5			74.3	
BT3349	putative sulfatase yidJ				23.0			79.2	
BT3350	Polysaccharide lyase family 8				44.1			52.9	
BT3750	susC-like			132.0				36.1	23.6
BT3751	outer membrane protein			15.8					12.4
BT3752	susD-like			19.1					
BT3753	endo-beta-N-acetylglucosaminidase F2 precursor			12.7					
BT3754	hypothetical protein			13.1					10.1
BT3773	Glycoside hydrolase family 92				10.7				
BT3774	Glycoside hydrolase family 38				20.0				
BT3775	hypothetical protein				52.0			41.4	14.7
BT3776	hypothetical protein				34.1			12.3	16.1
BT3777	hypothetical protein				70.6			54.2	86.6
BT3779	hypothetical protein		10.5	41.4				50.1	43.0
BT3780	hypothetical protein		10.3	88.5					

BT0988	Mg2+ transport ATPase protein B			30.6	16.0			56.2	96.9	33.2
BT1563	hypothetical protein							14.5	24.8	
BT1566	putative aluminum resistance protein							11.7	17.9	
BT1567	hypothetical protein							10.5	12.6	
BT1574	putative outer membrane protein precursor							24.4		
BT1798	hypothetical protein							14.1	212.4	14.0
BT1895	hypothetical protein							17.2	36.3	85.0
BT1896	putative cell surface antigen							17.5	59.8	20.4
BT2387	O-acetylhomoserine (thiol)-lyase							14.6	14.4	
BT2409	putative TonB-dependent outer membrane protein							37.6	28.3	23.3
BT4037	hypothetical protein						50.8			
BT4693	cation efflux system protein			104.9	16.9			10.3	16.0	
BT4694	cation efflux system protein			127.1	17.9			52.9	34.8	19.2
BT4695	outer membrane efflux protein precursor			11.3				43.3	48.1	33.9
								21.9	15.7	
Sector 2										
BT0226	hypothetical protein			11.9	17.8			12.7		
BT1564	hypothetical protein							15.5	21.5	
Sector 3										
BT1573	hypothetical protein			10.3						
BT2157	hypothetical protein				10.2					
Sector 4										
BT1419	hypothetical protein			12.0				73.5	23.5	31.4
										11.5
Sector 6										
BT2156	putative sugar phosphate isomerase/epimerase		11.9	13.7	10.7	15.1		15.6		
BT2158	putative dehydrogenases and related proteins					11.0		10.9		
BT3113	putative transmembrane efflux protein	10.3	12.9				11.9	29.4	16.4	25.9
BT3240	susC-like	12.9	11.8				11.2		10.1	10.8
BT3241	susD-like	13.2	14.8				13.0	15.1	10.9	
BT3242	hypothetical protein	15.4	17.3				17.4	18.7	18.1	
BT3243	hypothetical protein	10.7	10.7				10.9	11.0	11.9	
BT3244	hypothetical protein	13.5	15.1				14.8	16.4	16.4	
Sector 7										
BT1420	hypothetical protein							12.5		
BT2159	putative oxidoreductase								10.3	10.4
BT3430	ribosomal protein S20							10.2		
BT4499	conserved hypothetical protein, putative membrane protein			18.8				10.6	104.8	16.1