

Table S5. Genes unique to the *B. longum* subsp. *infantis* core genome

Locus	Description	Length (bp)	JCM1272¹ hits/bp gene	JCM11346 hits/bp gene
Genes conserved in ATCC15697, JCM1272, and JCM11346 (unique to the <i>infantis</i> core)				
Blon_0010	hypothetical protein	225	1.458	2.053
Blon_0012	addiction module toxin, RelE/StbE family	291	1.986	1.564
Blon_0013	addiction module antitoxin, RelB/DinJ family	279	1.710	1.215
Blon_0016	hypothetical protein	261	0.716	0.843
Blon_0017	hypothetical protein	645	1.836	1.491
Blon_0018	hypothetical protein	276	0.870	0.996
Blon_0023	phosphonate ABC transporter	939	1.147	0.858
Blon_0025	Haloacid dehalogenase domain protein hydrolase	720	0.708	0.639
Blon_0032	None	513	1.096	1.240
Blon_0033	None	129	1.023	1.000
Blon_0096	ThiJ/PfpI domain protein	615	1.761	1.408
Blon_0097	hypothetical protein	321	1.262	1.255
Blon_0100	None	207	1.942	0.546
Blon_0109	high-affinity nickel-transporter	975	1.282	0.941
Blon_0110	urease, gamma subunit	699	1.152	0.950
Blon_0111	urease, alpha subunit	1722	1.036	0.819
Blon_0112	UreE urease accessory domain protein	666	1.105	0.635
Blon_0113	Urease accessory protein UreF	822	0.977	0.775
Blon_0114	urease accessory protein UreG	612	1.114	1.093
Blon_0115	Urease accessory protein UreD	855	0.933	0.874
Blon_0118	major facilitator superfamily MFS_1	1176	1.097	0.772
Blon_0119	Uracil-DNA glycosylase superfamily	639	0.762	0.700
Blon_0135	zinc finger, CHY domain protein	366	1.590	1.522
Blon_0193	Predicted membrane protein	849	1.150	0.987
Blon_0212	hypothetical protein	156	0.936	1.404
Blon_0217	Ribbon-helix-helix protein, copG family.	285	0.821	1.228
Blon_0221	hypothetical protein	294	2.310	1.983
Blon_0246	None	174	2.046	0.264 ²
Blon_0248	Alpha-L-fucosidase	1350	2.138	1.123
Blon_0249	hypothetical protein	249	1.337	0.365
Blon_0256	hypothetical protein	363	1.132	0.920
Blon_0262	hypothetical protein	315	1.848	1.619
Blon_0287	hypothetical protein	888	0.545	0.676
Blon_0299	hypothetical protein	132	0.485	0.568
Blon_0300	hypothetical protein	285	0.856	0.681
Blon_0301	Uncharacterized protein conserved in bacteria	282	0.780	0.777
Blon_0331	hypothetical protein	210	1.148	0.867
Blon_0332	hypothetical protein	345	1.380	0.867
Blon_0334	RelB antitoxin	324	1.673	1.210
Blon_0344	Mandelate lactonizing enzyme	630	1.122	1.525
Blon_0346	Beta-galactosidase	2025	0.334	0.761
Blon_0348	Transposase and inactivated derivatives	600	1.170	0.835
Blon_0379	HipA domain protein	1218	1.827	1.956
Blon_0380	helix-turn-helix domain protein	294	1.592	1.827
Blon_0384	aminotransferase, class IV	798	0.701	0.449
Blon_0387	riboflavin synthase, alpha subunit	630	0.930	0.817
Blon_0388	GTP cyclohydrolase II	1206	1.322	1.065
Blon_0389	Riboflavin synthase	468	1.297	1.237
Blon_0397	hypothetical protein	279	1.609	1.197
Blon_0410	transcriptional regulator, Fis family	843	2.083	1.809
Blon_0419	binding-protein-dependent transport system	1785	0.996	0.892
Blon_0426	Alpha-L-fucosidase	1350	2.143	1.216
Blon_0434	bacteriocin, lactococcin 972 family	408	1.662	2.056
Blon_0435	hypothetical protein	1953	1.747	2.055
Blon_0437	hypothetical protein	405	2.242	2.277
Blon_0447	DNA primase, small subunit	1089	1.730	1.533

Blon_0448	hypothetical protein	1209	1.627	0.990
Blon_0449	Integrase, catalytic region	1077	0.734	0.649
Blon_0450	hypothetical protein	705	1.328	1.452
Blon_0451	hypothetical protein	645	1.453	1.360
Blon_0452	None	123	3.203	3.610
Blon_0453	hypothetical protein	759	1.904	1.826
Blon_0454	hypothetical protein	705	0.372	0.274
Blon_0456	hypothetical protein	498	2.092	2.293
Blon_0457	hypothetical protein	348	2.451	2.040
Blon_0476	hypothetical protein	429	0.445	0.622
Blon_0477	hypothetical protein	273	1.190	1.421
Blon_0478	asparagine synthase	1590	1.326	1.720
Blon_0479	hypothetical protein	213	1.756	1.981
Blon_0483	TraG/TraD family.	270	0.633	1.996
Blon_0484	Uncharacterized membrane protein	543	2.298	1.915
Blon_0485	hypothetical protein	546	1.095	1.357
Blon_0518	hypothetical protein	729	1.195	1.366
Blon_0519	hypothetical protein	627	1.523	1.407
Blon_0527	hypothetical protein	258	0.450	0.946
Blon_0528	hypothetical protein	435	0.667	1.028
Blon_0529	hypothetical protein	240	1.113	0.829
Blon_0533	hypothetical protein	156	0.712	0.571
Blon_0534	hypothetical protein	174	0.736	0.517
Blon_0535	hypothetical protein	279	1.151	0.935
Blon_0536	BetR domain.	465	1.351	1.166
Blon_0557	None	324	1.787	0.744
Blon_0558	major facilitator superfamily MFS_1	1188	2.062	1.556
Blon_0562	transcriptional regulator, PadR-like family	618	1.238	0.599
Blon_0588	hypothetical protein	420	1.271	0.767
Blon_0606	nucleoside 2-deoxyribosyltransferase	429	1.797	1.457
Blon_0609	hypothetical protein	1173	1.123	0.989
Blon_0615	Resolvase, N-terminal domain	588	1.328	0.294
Blon_0633	hypothetical protein	666	0.973	1.116
Blon_0634	diguanylate cyclase/phosphodiesterase	2169	1.055	0.948
Blon_0642	GntR domain protein	759	0.924	0.738
Blon_0643	hypothetical protein	912	0.854	0.500
Blon_0645	N-acylglucosamine-6-phosphate 2-epimerase	684	0.792	0.539
Blon_0646	BNR repeat-containing protein	2283	0.864	0.514
Blon_0678	None	318	0.465	0.456
Blon_0708	Gram-positive signal peptide, YSIRK family	306	1.373	1.186
Blon_0750	hypothetical protein	789	0.978	0.735
Blon_0752	hypothetical protein	1044	1.058	1.019
Blon_0765	hypothetical protein	222	0.910	0.689
Blon_0766	None	343	1.251	0.942
Blon_0772	hypothetical protein	225	1.058	1.151
Blon_0792	hypothetical protein	615	1.332	1.537
Blon_0864	ISXoo15 transposase	456	1.518	2.294
Blon_0886	hypothetical protein	180	1.028	1.033
Blon_0915	major facilitator superfamily MFS_1	1407	1.864	1.716
Blon_0948	hypothetical protein	300	0.847	0.873
Blon_0953	lipolytic enzyme, G-D-S-L family	633	0.741	0.861
Blon_0973	hypothetical protein	405	1.284	1.558
Blon_0974	HipA domain protein	1314	0.557	0.342
Blon_0984	hypothetical protein	519	1.671	1.590
Blon_0985	Abi family protein	954	0.913	1.136
Blon_0986	hypothetical protein	450	0.764	0.651
Blon_0987	hypothetical protein	249	0.775	0.739
Blon_0988	major facilitator superfamily MFS_1	1263	0.819	0.849
Blon_0993	hypothetical protein	243	1.132	0.222
Blon_0994	transcriptional regulator, Fis family	1302	2.035	1.571
Blon_0996	bacteriocin-associated integral membrane (putative immunity)	1956	1.419	0.956
Blon_1000	bacteriocin ABC transporter, permease protein subunit	744	1.402	1.606
Blon_1001	hypothetical protein	744	1.714	1.476

Blon_1002	hypothetical protein	807	1.413	1.302
Blon_1024	Integrase, catalytic region	810	0.299	0.678
Blon_1043	hypothetical protein	840	0.625	0.576
Blon_1044	hypothetical protein	852	0.581	0.617
Blon_1045	hypothetical protein	489	0.687	0.607
Blon_1046	hypothetical protein	351	1.094	1.011
Blon_1067	Predicted membrane protein	954	1.062	1.000
Blon_1068	Predicted membrane protein	729	0.539	0.934
Blon_1077	hypothetical protein	246	0.663	0.650
Blon_1171	hypothetical protein	318	0.836	0.950
Blon_1225	Resolvase, N-terminal domain	483	0.992	0.433
Blon_1226	transposase, IS605 OrfB family	1323	0.702	0.447
Blon_1356	Integrase, catalytic region	1074	0.592	0.658
Blon_1358	ABC-type antimicrobial peptide,permease component	1194	1.059	1.367
Blon_1372	Uncharacterized conserved protein, COG2135	693	0.988	0.902
Blon_1379	Uncharacterized protein conserved in bacteria, COG4367	246	0.622	0.829
Blon_1381	ISXoo11 transposase	246	2.801	1.390
Blon_1382	None	326	1.344	1.380
Blon_1383	SSS sodium solute transporter superfamily	1752	0.878	1.072
Blon_1384	hypothetical protein	342	0.877	1.137
Blon_1388	hypothetical protein	555	1.499	1.398
Blon_1389	hypothetical protein	321	0.667	0.474
Blon_1402	hypothetical protein	828	0.374	0.262
Blon_1404	hypothetical protein	783	0.436	0.294
Blon_1406	hypothetical protein	399	0.672	0.574
Blon_1413	None	1234	1.673	0.523
Blon_1428	hypothetical protein	240	0.858	0.875
Blon_1429	Uncharacterized conserved protein, COG3189	363	0.791	0.923
Blon_1430	hypothetical protein	318	0.619	0.896
Blon_1432	hypothetical protein	327	0.752	0.813
Blon_1433	hypothetical protein	402	0.639	0.786
Blon_1436	putative oxidoreductase	369	0.290	0.409
Blon_1438	putative helicase	885	1.016	0.990
Blon_1459	hypothetical protein	264	0.716	0.640
Blon_1466	zinc finger, SWIM domain protein	2706	0.878	1.006
Blon_1468	MazG nucleotide pyrophosphohydrolase	390	1.251	1.541
Blon_1469	Dehydrogenases with different specificities (related to short-chain	240	1.125	1.058
Blon_1470	zinc finger, SWIM domain protein	489	1.534	1.869
Blon_1578	NAD/NADP transhydrogenase alpha subunit-like	306	1.013	1.088
Blon_1599	peptidase A24A, prepilin type IV	474	1.143	1.209
Blon_1603	hypothetical protein	237	0.852	1.008
Blon_1606	RelB antitoxin	294	1.150	1.296
Blon_1607	transcriptional modulator of MazE/toxin, MazF	354	0.785	0.862
Blon_1608	transglutaminase domain protein	603	1.818	1.982
Blon_1609	hypothetical protein	357	1.356	1.398
Blon_1610	cytidine deaminase	441	1.077	1.034
Blon_1623	peptidase S51, dipeptidase E	624	0.622	0.577
Blon_1624	hypothetical protein	1158	0.835	0.682
Blon_1626	DNA binding domain, excisionase family	531	1.124	1.090
Blon_1627	hypothetical protein	588	1.272	1.425
Blon_1638	None	300	0.813	0.403
Blon_1639	None	234	0.615	0.581
Blon_1662	Integrase, catalytic region	1107	1.498	1.711
Blon_1676	hypothetical protein	393	0.382	0.402
Blon_1677	HipA-like C-terminal domain.	1257	0.866	0.842
Blon_1678	RelB antitoxin	252	1.111	1.036
Blon_1681	Methyltransferase type 11	870	0.303	0.898
Blon_1684	hypothetical protein	306	0.598	1.490
Blon_1687	TfoX, C-terminal domain protein	243	1.103	1.844
Blon_1709	hypothetical protein	381	0.898	0.672
Blon_1750	bacteriocin, lactococcin 972 family	447	1.244	1.642
Blon_1751	hypothetical protein	1971	1.618	1.976
Blon_1840	PilT protein domain protein	447	1.353	1.154

Blon_1859	ExsB family protein	756	2.135	2.132
Blon_1898	transcriptional regulator, PadR-like family	546	1.132	1.194
Blon_1914	transposase IS116/IS110/IS902 family protein	1182	0.671	0.286
Blon_1919	hypothetical protein	489	0.937	0.845
Blon_1928	transposase IS116/IS110/IS902 family protein	1266	0.793	0.780
Blon_1944	hypothetical protein	660	1.077	0.809
Blon_1947	transcriptional regulator	294	1.262	1.041
Blon_1950	hypothetical protein	219	0.548	0.717
Blon_1971	putative high-affinity zinc ABC transporter	438	0.934	0.696
Blon_1972	permease	1128	0.912	0.746
Blon_1973	hypothetical protein	756	0.922	0.704
Blon_1975	hypothetical protein	348	1.198	0.940
Blon_1976	hypothetical protein	243	0.741	0.679
Blon_1990	hypothetical protein	315	0.914	0.851
Blon_2005	hypothetical protein	303	1.010	0.680
Blon_2079	transcriptional regulator, XRE family	564	1.672	1.759
Blon_2086	transcriptional regulator, Fis family	1188	1.910	1.562
Blon_2097	transposase IS116/IS110/IS902 family protein	1266	0.781	0.764
Blon_2111	hypothetical protein	471	0.588	0.408
Blon_2115	hypothetical protein	243	1.021	0.638
Blon_2118	hypothetical protein	339	2.097	2.133
Blon_2125	Protein of unknown function (DUF797).	204	0.980	1.054
Blon_2189	hypothetical protein	174	0.793	0.764
Blon_2239	Acetolactate decarboxylase	768	1.345	1.173
Blon_2261	putative regulatory protein, FmdB family	186	1.608	1.710
Blon_2263	hypothetical protein	201	1.010	1.224
Blon_2274	hypothetical protein	660	2.209	1.908
Blon_2278	hypothetical protein	174	1.770	2.075
Blon_2279	Integrase, catalytic region	759	0.702	0.659
Blon_2281	hypothetical protein	555	2.553	2.429
Blon_2305	RbsD or FucU transport	447	1.291	1.177
Blon_2306	amidohydrolase 2	768	1.043	1.272
Blon_2307	major facilitator superfamily MFS_1	1284	1.322	1.188
Blon_2309	Mandelate lactonizing enzyme	1284	1.245	1.249
Blon_2335	hypothetical protein	2349	0.813	0.877
Blon_2336	alpha-1,3/4-fucosidase, putative	1437	1.072	0.798
Blon_2337	RbsD or FucU transport	438	1.386	1.297
Blon_2340	Mandelate lactonizing enzyme	1278	1.164	1.267
Blon_2348	Exo-alpha-sialidase	1185	1.003	0.644
Blon_2353	hypothetical protein	123	1.138	1.358
Blon_2356	Haloacid dehalogenase domain protein hydrolase	741	0.727	0.702
Blon_2358	beta-lactamase domain protein	1320	1.201	1.226
Blon_2362	Uncharacterized conserved protein, COG4283	522	1.134	1.222
Blon_2425	hypothetical protein	297	0.966	0.721
Blon_2446	hypothetical protein	378	1.045	0.913
Blon_2450	hypothetical protein	207	1.870	1.280
Blon_2454	hypothetical protein	612	1.297	1.131
Blon_2468	glycosyl hydrolase, family 20	1638	2.048	1.622
Blon_2471	PTS system, N-acetylglucosamine-specific IIBC	1539	1.173	0.782

Genes exclusive to ATCC15697

Blon_0490	hypothetical protein	672	0.000	0.000
Blon_0492	hypothetical protein	1695	0.000	0.000
Blon_0494	flavodoxin/nitric oxide synthase	465	0.000	0.000
Blon_0496	phosphoribosylglycinamide synthetase	1203	0.000	0.000
Blon_0520	hypothetical protein	720	0.000	0.000
Blon_0521	Lanthionine synthetase C family protein	1206	0.000	0.000
Blon_0523	ABC-2 type transporter	672	0.000	0.000
Blon_0657	type I phosphodiesterase/nucleotide pyrophosphatase	828	0.000	0.000
Blon_0809	ATP-dependent nuclease subunit B-like	3306	0.000	0.001
Blon_0812	hypothetical protein	1287	0.000	0.002
Blon_0813	hypothetical protein	339	0.000	0.000
Blon_1099	hypothetical protein	261	0.000	0.004

Blon_1100	glycoside hydrolase, family 25	1245	0.000	0.001
Blon_1101	hypothetical protein	381	0.000	0.000
Blon_1102	hypothetical protein	294	0.000	0.000
Blon_1104	hypothetical protein	1221	0.000	0.000
Blon_1105	hypothetical protein	900	0.000	0.000
Blon_1106	hypothetical protein	900	0.000	0.000
Blon_1107	phage tail tape measure protein, TP901 family	3354	0.000	0.000
Blon_1108	hypothetical protein	297	0.000	0.000
Blon_1109	hypothetical protein	495	0.000	0.000
Blon_1110	hypothetical protein	243	0.000	0.000
Blon_1111	hypothetical protein	537	0.000	0.000
Blon_1112	hypothetical protein	408	0.000	0.000
Blon_1113	hypothetical protein	390	0.000	0.000
Blon_1114	hypothetical protein	372	0.000	0.000
Blon_1115	hypothetical protein	420	0.000	0.000
Blon_1116	phage major capsid protein, HK97	888	0.000	0.000
Blon_1117	hypothetical protein	669	0.000	0.000
Blon_1118	hypothetical protein	870	0.000	0.000
Blon_1119	Protein of unknown function (DUF1483).	1434	0.000	0.000
Blon_1120	hypothetical protein	1620	0.000	0.001
Blon_1121	hypothetical protein	537	0.000	0.000
Blon_1122	hypothetical protein	495	0.000	0.000
Blon_1123	hypothetical protein	777	0.000	0.000
Blon_1124	hypothetical protein	513	0.000	0.000
Blon_1125	hypothetical protein	243	0.000	0.000
Blon_1126	hypothetical protein	186	0.000	0.000
Blon_1127	hypothetical protein	375	0.000	0.000
Blon_1128	pancreatic ribonuclease	2283	0.000	0.000
Blon_1129	hypothetical protein	177	0.000	0.000
Blon_1130	hypothetical protein	825	0.000	0.000
Blon_1131	hypothetical protein	933	0.000	0.000
Blon_1132	hypothetical protein	399	0.000	0.000
Blon_1133	hypothetical protein	384	0.003	0.000
Blon_1134	hypothetical protein	330	0.000	0.000
Blon_1135	endodeoxyribonuclease RusA	429	0.000	0.000
Blon_1136	hypothetical protein	264	0.000	0.000
Blon_1137	hypothetical protein	342	0.000	0.000
Blon_1138	hypothetical protein	234	0.000	0.000
Blon_1139	hypothetical protein	279	0.000	0.000
Blon_1140	hypothetical protein	810	0.000	0.000
Blon_1141	hypothetical protein	303	0.000	0.000
Blon_1142	hypothetical protein	279	0.000	0.000
Blon_1143	hypothetical protein	396	0.003	0.000
Blon_1144	Domain of unknown function (DUF955).	324	0.000	0.000
Blon_1146	Molecular chaperone, HSP90 family	2055	0.000	0.000
Blon_1147	hypothetical protein	690	0.000	0.000
Blon_1148	hypothetical protein	618	0.000	0.000
Blon_1175	DNA binding domain, excisionase family	234	0.000	0.000
Blon_1176	hypothetical protein	249	0.000	0.000
Blon_1178	hypothetical protein	417	0.000	0.000
Blon_1179	transposase, IS605 OrfB family	1323	0.000	0.000
Blon_1180	hypothetical protein	579	0.000	0.000
Blon_1181	hypothetical protein	1065	0.000	0.000
Blon_1182	LigA	876	0.000	0.000
Blon_1183	hypothetical protein	282	0.000	0.000
Blon_1184	LPXTG-motif cell wall anchor domain	2412	0.000	0.000
Blon_1185	leucine rich repeat variant	420	0.000	0.000
Blon_1186	VRR-NUC domain.	291	0.000	0.000
Blon_1187	hypothetical protein	459	0.000	0.000
Blon_1188	hypothetical protein	213	0.000	0.000
Blon_1189	hypothetical protein	828	0.000	0.000
Blon_1190	hypothetical protein	411	0.000	0.000
Blon_1191	hypothetical protein	747	0.000	0.000

Blon_1192	hypothetical protein	429	0.000	0.000
Blon_1193	hypothetical protein	1881	0.000	0.000
Blon_1194	hypothetical protein	1314	0.000	0.000
Blon_1195	transposase, IS605 OrfB	1458	0.000	0.000
Blon_1196	None	243	0.000	0.000
Blon_1197	adenine-specific methyltransferase EcoRI	681	0.000	0.000
Blon_1198	hypothetical protein	774	0.000	0.000
Blon_1199	hypothetical protein	342	0.000	0.000
Blon_1200	N-formylglutamate amidohydrolase	918	0.000	0.000
Blon_1202	hypothetical protein	870	0.000	0.000
Blon_1203	hypothetical protein	180	0.000	0.000
Blon_1205	hypothetical protein	1014	0.000	0.000
Blon_1206	hypothetical protein	354	0.000	0.000
Blon_1207	hypothetical protein	396	0.000	0.000
Blon_1208	hypothetical protein	2943	0.000	0.000
Blon_1209	hypothetical protein	762	0.000	0.000
Blon_1210	HNH endonuclease.	702	0.000	0.000
Blon_1211	hypothetical protein	387	0.000	0.000
Blon_1212	hypothetical protein	669	0.000	0.000
Blon_1213	hypothetical protein	459	0.000	0.000
Blon_1214	transcriptional regulator, XRE family	552	0.000	0.000
Blon_1215	DNA methylase N-4/N-6 domain protein	1317	0.000	0.000
Blon_1216	hypothetical protein	525	0.000	0.000
Blon_1217	hypothetical protein	1083	0.000	0.000
Blon_1218	hypothetical protein	564	0.000	0.000
Blon_1219	hypothetical protein	498	0.000	0.000
Blon_1220	hypothetical protein	984	0.000	0.000
Blon_1222	hypothetical protein	918	0.000	0.000
Blon_1224	hypothetical protein	375	0.000	0.000
Blon_1231	hypothetical protein	327	0.083	0.070
Blon_1234	hypothetical protein	684	0.001	0.000
Blon_1235	hypothetical protein	402	0.000	0.000
Blon_1236	hypothetical protein	324	0.000	0.000
Blon_1238	transcriptional regulator, XRE family	576	0.000	0.000
Blon_1242	hypothetical protein	4149	0.000	0.000
Blon_1243	hypothetical protein	261	0.000	0.000
Blon_1244	hypothetical protein	1317	0.000	0.000
Blon_1245	hypothetical protein	807	0.000	0.000
Blon_1246	CHAP domain containing protein	1272	0.000	0.000
Blon_1247	hypothetical protein	276	0.000	0.000
Blon_1248	hypothetical protein	663	0.000	0.000
Blon_1250	hypothetical protein	2370	0.000	0.000
Blon_1251	hypothetical protein	906	0.000	0.000
Blon_1252	hypothetical protein	411	0.000	0.000
Blon_1253	hypothetical protein	792	0.000	0.000
Blon_1254	hypothetical protein	591	0.000	0.000
Blon_1255	hypothetical protein	1665	0.000	0.000
Blon_1256	hypothetical protein	294	0.000	0.000
Blon_1257	hypothetical protein	1275	0.000	0.000
Blon_1258	cell divisionFtsK/SpoIIIE	3297	0.000	0.000
Blon_1262	hypothetical protein	684	0.000	0.000
Blon_1263	Helicase superfamily 3	2514	0.000	0.000
Blon_1264	hypothetical protein	249	0.000	0.000
Blon_1267	hypothetical protein	384	0.000	0.000
Blon_1268	hypothetical protein	456	0.000	0.000
Blon_1270	hypothetical protein	294	0.000	0.000
Blon_1271	hypothetical protein	327	0.000	0.000
Blon_1272	hypothetical protein	306	0.000	0.000
Blon_1273	hypothetical protein	531	0.000	0.000
Blon_1274	hypothetical protein	267	0.000	0.000
Blon_1275	hypothetical protein	291	0.000	0.000
Blon_1276	hypothetical protein	1011	0.000	0.000
Blon_1277	hypothetical protein	612	0.000	0.000

Blon_1278	hypothetical protein	567	0.000	0.000
Blon_1279	hypothetical protein	615	0.000	0.000
Blon_1281	hypothetical protein	540	0.000	0.000
Blon_1282	hypothetical protein	303	0.000	0.000
Blon_1283	hypothetical protein	363	0.000	0.000
Blon_1285	hypothetical protein	507	0.000	0.000
Blon_1286	hypothetical protein	225	0.000	0.000
Blon_1287	hypothetical protein	597	0.000	0.000
Blon_1288	metallophosphoesterase	738	0.000	0.000
Blon_1289	hypothetical protein	360	0.000	0.000
Blon_1290	hypothetical protein	519	0.000	0.000
Blon_1291	hypothetical protein	408	0.000	0.000
Blon_1292	hypothetical protein	537	0.000	0.000
Blon_1293	hypothetical protein	489	0.000	0.000
Blon_1294	hypothetical protein	300	0.000	0.000
Blon_1295	hypothetical protein	423	0.000	0.000
Blon_1296	hypothetical protein	219	0.000	0.000
Blon_1297	hypothetical protein	366	0.000	0.000
Blon_1298	RNA ligase, DRB0094 family	864	0.000	0.000
Blon_1299	hypothetical protein	177	0.000	0.000
Blon_1300	hypothetical protein	816	0.000	0.000
Blon_1301	hypothetical protein	552	0.000	0.000
Blon_1302	hypothetical protein	243	0.000	0.000
Blon_1304	hypothetical protein	273	0.000	0.000
Blon_1305	hypothetical protein	177	0.000	0.000
Blon_1306	hypothetical protein	258	0.000	0.000
Blon_1307	transposase IS200-family protein	399	0.070	0.000
Blon_1308	putative transposase, IS891/IS1136/IS1341 family	1146	0.000	0.000
Blon_1309	hypothetical protein	333	0.000	0.000
Blon_1310	hypothetical protein	276	0.000	0.000
Blon_1311	hypothetical protein	828	0.000	0.000
Blon_1312	hypothetical protein	336	0.000	0.000
Blon_1313	hypothetical protein	681	0.000	0.000
Blon_1314	hypothetical protein	444	0.000	0.000
Blon_1315	transposase, IS605 OrfB family	1230	0.000	0.000
Blon_1316	hypothetical protein	1326	0.000	0.000
Blon_1317	hypothetical protein	255	0.000	0.000
Blon_1318	hypothetical protein	333	0.000	0.000
Blon_1319	hypothetical protein	1353	0.000	0.000
Blon_1320	hypothetical protein	1050	0.000	0.000
Blon_1321	hypothetical protein	309	0.000	0.000
Blon_1322	hypothetical protein	204	0.000	0.005
Blon_1323	hypothetical protein	471	0.000	0.059
Blon_1324	putative DNA methyltransferase	2799	0.000	0.129
Blon_1325	hypothetical protein	393	0.000	0.135
Blon_1326	hypothetical protein	411	0.000	0.000
Blon_1327	hypothetical protein	384	0.000	0.000
Blon_1328	hypothetical protein	348	0.000	0.000
Blon_1329	hypothetical protein	540	0.000	0.000
Blon_1330	hypothetical protein	366	0.000	0.000
Blon_1331	hypothetical protein	351	0.000	0.000
Blon_1332	hypothetical protein	312	0.000	0.000
Blon_1333	hypothetical protein	474	0.000	0.000
Blon_1334	hypothetical protein	642	0.000	0.000
Blon_1335	hypothetical protein	198	0.000	0.000
Blon_1336	hypothetical protein	468	0.000	0.000
Blon_1337	hypothetical protein	288	0.000	0.000
Blon_1338	putative transcriptional regulator, XRE family	309	0.000	0.000
Blon_1340	hypothetical protein	432	0.000	0.000
Blon_1341	hypothetical protein	285	0.000	0.000
Blon_1342	hypothetical protein	537	0.000	0.002
Blon_1343	hypothetical protein	363	0.000	0.000
Blon_1344	hypothetical protein	582	0.000	0.000

Blon_1345	hypothetical protein	282	0.000	0.000
Blon_1346	DNA methylase N-4/N-6 domain protein	1119	0.000	0.000
Blon_1347	hypothetical protein	396	0.000	0.000
Blon_1350	transposase, IS605 OrfB family	1461	0.000	0.000
Blon_1351	hypothetical protein	309	0.000	0.000
Blon_1352	hypothetical protein	207	0.000	0.000
Blon_1354	hypothetical protein	303	0.000	0.043
Blon_1355	hypothetical protein	123	0.000	0.122
Blon_1394	hypothetical protein	513	0.000	0.002
Blon_1395	hypothetical protein	837	0.000	0.147
Blon_1403	hypothetical protein	627	0.123	0.062
Blon_1407	hypothetical protein	363	0.000	0.000
Blon_1409	hypothetical protein	624	0.037	0.022
Blon_1410	hypothetical protein	729	0.081	0.041
Blon_1418	hypothetical protein	534	0.000	0.000
Blon_1419	hypothetical protein	303	0.000	0.003
Blon_1420	hypothetical protein	345	0.000	0.009
Blon_1421	putative transcriptional regulator, MerR family	414	0.000	0.184
Blon_1464	zinc finger, SWIM domain protein	1923	0.000	0.000
Blon_1491	Uncharacterized phage-associated protein, COG3600	438	0.000	0.000
Blon_1492	hypothetical protein	504	0.000	0.000
Blon_1493	hypothetical protein	621	0.000	0.000
Blon_1494	hypothetical protein	303	0.000	0.000
Blon_1495	hypothetical protein	363	0.000	0.000
Blon_1496	helix-turn-helix domain protein	363	0.000	0.000
Blon_1497	hypothetical protein	294	0.000	0.000
Blon_1498	hypothetical protein	216	0.000	0.000
Blon_1499	hypothetical protein	366	0.000	0.000
Blon_1500	hypothetical protein	354	0.000	0.000
Blon_1501	hypothetical protein	279	0.000	0.000
Blon_1502	hypothetical protein	852	0.000	0.000
Blon_1503	ERF superfamily.	585	0.000	0.000
Blon_1504	hypothetical protein	897	0.000	0.000
Blon_1506	hypothetical protein	354	0.000	0.000
Blon_1507	hypothetical protein	942	0.000	0.000
Blon_1508	hypothetical protein	534	0.000	0.000
Blon_1509	hypothetical protein	363	0.000	0.000
Blon_1510	hypothetical protein	246	0.000	0.000
Blon_1511	hypothetical protein	513	0.000	0.000
Blon_1512	hypothetical protein	288	0.000	0.000
Blon_1513	hypothetical protein	285	0.000	0.000
Blon_1514	hypothetical protein	165	0.000	0.000
Blon_1515	hypothetical protein	210	0.000	0.000
Blon_1517	hypothetical protein	291	0.000	0.000
Blon_1518	hypothetical protein	393	0.000	0.000
Blon_1519	hypothetical protein	372	0.000	0.000
Blon_1520	hypothetical protein	276	0.000	0.000
Blon_1521	hypothetical protein	240	0.000	0.000
Blon_1522	hypothetical protein	879	0.000	0.000
Blon_1523	hypothetical protein	462	0.000	0.000
Blon_1524	hypothetical protein	912	0.000	0.000
Blon_1525	Prophage antirepressor	336	0.000	0.000
Blon_1528	phage antirepressor protein	780	0.000	0.000
Blon_1529	hypothetical protein	258	0.000	0.000
Blon_1530	hypothetical protein	492	0.000	0.000
Blon_1531	None	327	0.000	0.000
Blon_1532	hypothetical protein	261	0.000	0.000
Blon_1533	hypothetical protein	345	0.000	0.000
Blon_1534	hypothetical protein	372	0.000	0.000
Blon_1536	hypothetical protein	546	0.000	0.000
Blon_1537	hypothetical protein	369	0.019	0.000
Blon_1538	addiction module antitoxin, RelB/DinJ family	285	0.000	0.000
Blon_1539	hypothetical protein	300	0.000	0.000

Blon_1540	hypothetical protein	342	0.000	0.000
Blon_1541	hypothetical protein	786	0.000	0.000
Blon_1542	hypothetical protein	342	0.000	0.000
Blon_1543	hypothetical protein	342	0.000	0.000
Blon_1544	hypothetical protein	243	0.000	0.000
Blon_1545	Cpl-7 lysozyme, C-terminal domain protein	615	0.000	0.000
Blon_1546	HNH endonuclease	384	0.000	0.000
Blon_1547	hypothetical protein	480	0.000	0.000
Blon_1548	hypothetical protein	1899	0.000	0.000
Blon_1549	hypothetical protein	1623	0.000	0.000
Blon_1550	hypothetical protein	1077	0.000	0.000
Blon_1551	hypothetical protein	636	0.000	0.000
Blon_1552	hypothetical protein	795	0.000	0.000
Blon_1553	hypothetical protein	1071	0.000	0.000
Blon_1554	hypothetical protein	432	0.000	0.000
Blon_1555	hypothetical protein	564	0.000	0.000
Blon_1556	hypothetical protein	306	0.000	0.000
Blon_1557	hypothetical protein	459	0.000	0.000
Blon_1558	hypothetical protein	606	0.000	0.000
Blon_1559	hypothetical protein	423	0.000	0.000
Blon_1560	hypothetical protein	351	0.000	0.000
Blon_1562	hypothetical protein	951	0.000	0.000
Blon_1564	hypothetical protein	573	0.000	0.000
Blon_1565	hypothetical protein	171	0.000	0.000
Blon_1566	hypothetical protein	501	0.066	0.040
Blon_1568	hypothetical protein	510	0.000	0.000
Blon_1569	hypothetical protein	456	0.000	0.000
Blon_1570	hypothetical protein	396	0.000	0.000
Blon_1571	glycoside hydrolase, family 25	1233	0.010	0.000
Blon_1572	hypothetical protein	267	0.000	0.000
Blon_1573	hypothetical protein	495	0.000	0.000
Blon_1654	glycoside hydrolase, family 25	1119	0.079	0.001
Blon_1655	hypothetical protein	900	0.004	0.000
Blon_1656	hypothetical protein	606	0.000	0.002
Blon_1657	hypothetical protein	387	0.000	0.003
Blon_1658	HNH nuclease	333	0.000	0.000
Blon_1659	hypothetical protein	192	0.000	0.000
Blon_1660	hypothetical protein	525	0.000	0.000
Blon_1661	hypothetical protein	1059	0.000	0.000
Blon_1664	GCN5-related N-acetyltransferase	519	0.000	0.006
Blon_1667	hypothetical protein	480	0.000	0.000
Blon_1668	hypothetical protein	528	0.002	0.000
Blon_1669	hypothetical protein	267	0.015	0.004
Blon_1670	hypothetical protein	846	0.018	0.001
Blon_1734	hypothetical protein	141	0.000	0.000
Blon_1735	hypothetical protein	885	0.000	0.000
Blon_1736	hypothetical protein	267	0.000	0.000
Blon_1737	hypothetical protein	327	0.000	0.000
Blon_1738	hypothetical protein	393	0.000	0.000
Blon_1782	Uncharacterized conserved protein, COG4748	1089	0.000	0.000
Blon_1783	Domain of unknown function (DUF955).	330	0.000	0.000
Blon_1784	hypothetical protein	255	0.000	0.000
Blon_1785	hypothetical protein	255	0.000	0.000
Blon_1786	hypothetical protein	507	0.000	0.000
Blon_1787	hypothetical protein	762	0.000	0.000
Blon_1788	hypothetical protein	243	0.000	0.000
Blon_1789	hypothetical protein	345	0.000	0.000
Blon_1790	hypothetical protein	231	0.000	0.000
Blon_1794	hypothetical protein	525	0.000	0.000
Blon_1796	hypothetical protein	393	0.000	0.000
Blon_1797	hypothetical protein	411	0.000	0.000
Blon_1798	hypothetical protein	303	0.000	0.000
Blon_1799	hypothetical protein	306	0.000	0.000

Blon_1800	hypothetical protein	210	0.000	0.000
Blon_1801	hypothetical protein	597	0.000	0.000
Blon_1802	hypothetical protein	297	0.000	0.000
Blon_1803	hypothetical protein	303	0.000	0.000
Blon_1804	hypothetical protein	363	0.000	0.000
Blon_1805	hypothetical protein	225	0.000	0.000
Blon_1806	hypothetical protein	210	0.000	0.000
Blon_1807	hypothetical protein	774	0.012	0.005
Blon_1808	hypothetical protein	198	0.000	0.000
Blon_1809	hypothetical protein	351	0.000	0.000
Blon_1810	hypothetical protein	411	0.000	0.000
Blon_1811	phage Terminase	1404	0.000	0.000
Blon_1812	Protein of unknown function (DUF1483).	1494	0.000	0.000
Blon_1813	hypothetical protein	1419	0.000	0.000
Blon_1814	hypothetical protein	465	0.000	0.000
Blon_1815	phage structural protein	942	0.000	0.000
Blon_1816	hypothetical protein	564	0.000	0.000
Blon_1817	hypothetical protein	408	0.000	0.000
Blon_1818	hypothetical protein	345	0.000	0.000
Blon_1819	hypothetical protein	276	0.000	0.000
Blon_1820	hypothetical protein	378	0.000	0.000
Blon_1821	prophage LambdaSa03, structural protein, putative	600	0.000	0.000
Blon_1822	hypothetical protein	366	0.000	0.005
Blon_1824	hypothetical protein	978	0.000	0.000
Blon_1826	hypothetical protein	573	0.000	0.000
Blon_1827	hypothetical protein	171	0.000	0.000
Blon_1828	hypothetical protein	510	0.000	0.000
Blon_1829	hypothetical protein	456	0.000	0.000
Blon_1830	hypothetical protein	396	0.000	0.000
Blon_1831	glycoside hydrolase, family 25	1233	0.010	0.000
Blon_1832	holin	219	0.000	0.000
Blon_1903	hypothetical protein	408	0.000	0.000
Blon_1906	RnfABCDGE type, D subunit	1086	0.000	0.000
Blon_2099	polysaccharide biosynthesis protein	1536	0.001	0.098
Blon_2104	glycosyl transferase, family 14	882	0.000	0.000
Blon_2105	Capsular polysaccharide synthesis	954	0.000	0.000
Blon_2108	hypothetical protein	1170	0.000	0.000
Blon_2110	glycosyltransferase	819	0.000	0.035
Blon_2122	metallophosphoesterase	2457	0.048	0.057
Blon_2155	Cytochrome P450-like	1113	0.000	0.000
Blon_2158	hypothetical protein	915	0.000	0.152
Blon_2275	hypothetical protein	201	0.000	0.000
Blon_2382	hypothetical protein	1128	0.000	0.000
Blon_2388	glycosyl transferase, family 8	1791	0.000	0.000
Blon_2389	UDP-glucose/GDP-mannose dehydrogenase	1245	0.000	0.000

Genes common to ATCC15697 and JCM1272 OR JCM11346

Blon_0015	None	213	0.000	0.601
Blon_0041	hypothetical protein	1563	0.000	1.596
Blon_0098	hypothetical protein	348	1.152	0.000
Blon_0099	hypothetical protein	240	1.108	0.000
Blon_0121	hypothetical protein	627	0.927	0.002
Blon_0122	hypothetical protein	189	0.857	0.021
Blon_0213	hypothetical protein	300	0.000	0.543
Blon_0239	hypothetical protein	693	1.387	0.000
Blon_0241	ABC-2 type transporter	771	2.162	0.000
Blon_0245	major facilitator superfamily MFS_1	1206	1.434	0.000
Blon_0269	None	486	0.340	0.099
Blon_0284	hypothetical protein	162	2.302	0.000
Blon_0285	alpha/beta superfamily hydrolase	735	1.951	0.000
Blon_0286	lactoylglutathione lyase (LGUL) family	348	1.560	0.000
Blon_0289	None	950	2.012	0.000
Blon_0290	Glyoxalase/bleomycin resistance protein	501	2.166	0.000
Blon_0291	hypothetical protein	396	2.545	0.000

Blon_0292	helix-turn-helix domain protein	552	2.625	0.000
Blon_0293	hypothetical protein	216	1.407	0.000
Blon_0294	hypothetical protein	192	1.813	0.000
Blon_0295	plasmid replication protein	411	1.564	0.000
Blon_0296	hypothetical protein	849	1.344	0.000
Blon_0297	hypothetical protein	168	1.399	0.000
Blon_0298	hypothetical protein	1068	1.902	0.000
Blon_0347	hypothetical protein	1179	0.020	0.757
Blon_0378	hypothetical protein	1968	0.000	1.589
Blon_0465	hypothetical protein	363	0.747	0.000
Blon_0466	hypothetical protein	399	1.000	0.000
Blon_0467	ABC-type transport system, permease	1425	0.852	0.000
Blon_0470	Lanthionine synthetase C family protein	2658	2.140	0.000
Blon_0487	hypothetical protein	789	0.190	0.850
Blon_0488	hypothetical protein	261	0.939	0.000
Blon_0503	None	414	1.169	0.000
Blon_0504	hypothetical protein	381	1.220	0.000
Blon_0505	hypothetical protein	825	1.079	0.000
Blon_0506	hypothetical protein	207	0.411	0.000
Blon_0507	hypothetical protein	360	1.256	0.000
Blon_0511	hypothetical protein	405	0.817	0.000
Blon_0512	hypothetical protein	687	1.217	0.000
Blon_0525	hypothetical protein	741	0.000	1.839
Blon_0526	helix-turn-helix domain protein	1206	0.000	2.080
Blon_0556	hypothetical protein	369	1.062	0.111
Blon_0563	transposase IS116/IS110/IS902 family protein	1200	0.349	0.180
Blon_0616	transposase, IS605 OrfB family	1305	1.324	0.126
Blon_0661	Na-galactoside symporter	1533	0.000	2.043
Blon_0667	Mandelate lactonizing enzyme	1248	0.000	1.393
Blon_0668	Mannitol dehydrogenase, C-terminal domain	1395	0.000	1.092
Blon_0669	Glucuronate isomerase	1431	0.001	1.484
Blon_0670	HIT family hydrolase	429	0.000	1.739
Blon_0763	Integrase, catalytic region	666	1.135	0.135
Blon_0863	ABC-2 type transporter	732	0.000	0.904
Blon_0866	hypothetical protein	297	0.000	0.566
Blon_0981	hypothetical protein	897	1.397	0.000
Blon_0983	phage integrase family protein	1344	0.700	0.000
Blon_0990	Bacterial protein of unknown function (DUF961).	381	1.071	0.000
Blon_0991	hypothetical protein	438	1.760	0.000
Blon_0992	hypothetical protein	234	0.996	0.000
Blon_0998	transposase for IS3509a	1137	0.051	3.081
Blon_1022	hypothetical protein	390	0.000	2.074
Blon_1023	hypothetical protein	1125	0.000	1.839
Blon_1025	transposase IS116/IS110/IS902 family protein	1266	0.024	0.567
Blon_1026	hypothetical protein	399	0.000	1.080
Blon_1027	hypothetical protein	720	0.000	1.461
Blon_1028	hypothetical protein	903	0.000	1.420
Blon_1029	Methylase of polypeptide chain release factors-like	1137	0.000	1.434
Blon_1031	None	606	0.033	1.287
Blon_1037	hypothetical protein	285	0.786	0.000
Blon_1038	hypothetical protein	540	1.624	0.000
Blon_1039	Integrase, catalytic region	1116	0.669	0.122
Blon_1168	transposase for IS3509a	1110	0.011	0.591
Blon_1230	hypothetical protein	759	0.888	0.000
Blon_1241	transposase IS116/IS110/IS902 family protein	1200	0.356	0.180
Blon_1377	Selenocysteine lyase-like	660	0.000	0.605
Blon_1385	hypothetical protein	513	1.612	0.094
Blon_1387	Uncharacterized conserved protein, COG0585	1038	1.845	0.000
Blon_1398	addiction module antitoxin, RelB/DinJ family	264	0.000	1.038
Blon_1399	addiction module toxin, RelE/StbE family	294	0.000	0.769
Blon_1412	transposase IS116/IS110/IS902 family protein	1203	0.329	0.170
Blon_1423	amidohydrolase-like	324	0.750	0.003
Blon_1437	Uncharacterized conserved protein, COG3189	351	0.134	1.088

Blon_1567	transposase IS116/IS110/IS902 family protein	1203	0.357	0.181
Blon_1625	hypothetical protein	435	0.000	0.269
Blon_1653	hypothetical protein	222	0.680	0.000
Blon_1671	hypothetical protein	375	0.003	0.347
Blon_1724	None	213	1.202	0.000
Blon_1933	hypothetical protein	717	2.128	0.000
Blon_1964	hypothetical protein	720	1.154	0.001
Blon_1969	ribosomal protein L36	123	1.398	0.000
Blon_2053	hypothetical protein	261	1.383	0.000
Blon_2090	hypothetical protein	537	0.000	1.760
Blon_2091	hypothetical protein	327	0.000	1.584
Blon_2092	hypothetical protein	864	0.000	1.520
Blon_2093	hypothetical protein	2811	0.000	1.896
Blon_2100	hypothetical protein	696	0.359	0.000
Blon_2113	transposase IS116/IS110/IS902 family protein	1203	0.350	0.181
Blon_2282	hypothetical protein	180	0.939	0.167
Blon_2373	GCN5-related N-acetyltransferase	447	0.969	0.000
Blon_2402	N-acylglucosamine-6-phosphate 2-epimerase	696	0.000	1.342
Blon_2431	transposase for IS3509a	1137	0.050	3.131

¹ Hits/bp refer to number of observed BLASTN alignments to a ATCC15697 gene per length

² Values highlighted in yellow present a low hit density ($0.25 \geq 0.5$) that may or may not signal homolog presence