



BIOLOGICAL
CRYSTALLOGRAPHY

Volume 71 (2015)

Supporting information for article:

Selecting soluble/foldable protein domains through single gene- or genomic ORF-filtering: crystal structure of the head domain of *Burkholderia pseudomallei* antigen BPSL2063

Louise J. Gourlay, Clelia Peano, Cecilia Deantonio, Lucia Perletti, Alessandro Pietrelli, Riccardo Villa, Elena Matterazzo, Patricia Lassaux, Claudio Santoro, Simone Puccio, Daniele Sblattero and Martino Bolognesi

Table S1 Details for the cloning and production of BPSL1626, BPSL1801, BPSL2520 and BPSL2063.

Restriction sites are highlighted in bold; the additional 5' CACC sequence necessary for topoisomerase cloning is underlined. Protein residues corresponding to vector cloning regions and fusion tags are indicated in italics.

DNA source: *Burkholderia pseudomallei* strain K96243

BPSL1626 Forward primer: CACCCAGACCGCGACGACCGGC

BPSL1626 Reverse primer: CTACTTGTACGTCAGCGCGAATACCGC

BPSL1801 Forward primer: CACCGCCGGCACCGGCACC

BPSL1801 Reverse primer: TTACTGGTAGCGAACCGTGAAGTTCGC

BPSL2063_{D1} Forward primer: CACCCAAGCAGGGCAGAACGTG

BPSL2063_{D1} Reverse primer: CTGATTTTCAGAGCACGACGCTGTTGT

BPSL2063_{D2} Forward primer: CACCGCCGTGACCGCGCCGTCGTA

BPSL2063_{D2} Reverse primer: GATCGTCAGTCCTTGTCGACCTC

Expression vector: pET151/D-TOPO (Invitrogen)

Expression host: BL21 (DE3) Star *E. coli* cells

Complete amino acid sequence of the construct produced:

BPSL1626:

HHHHHHGKPIP NLLGLDSTENLYFQGIDPFTQTATTGTINFTGSITDVPCEIDTAATSSNVTMAK
VFANDFSGVGGSTTGTTAFKIVLKNCGASTSGATVRFMGTTDSANPAALQTTAGGAGGVALQL
VDDTGTPISIGSSSKAYTIAEGDNTFNFAARYIATSATVTGGAANATAVFALTYK

BPSL1801:

HHHHHHGKPIP NLLGLDSTENLYFQGIDPFTAGTGTLNFTGEIVAGACGIDAGSVDQTVRLGF
VPANTFKAAGDKSTPQNFDIKLVDCDTSVAKNAYFTFTGTSNATQPCLIATVGSATNVGIRLQ
SASGEYLDNGAEQKGPVVLNNGTSVARFAAMYESTAASVTPGTADGVANFTVRYQ

BPSL2063_{D1}:

MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDHPTQAGQNVNAIDTVSIGKQATASANDA
IAIGTNTKASGPADIYMGLNAGAGAGSTTSPDGTVTLGIRNMGLGESAGSYVTGQNNTGIGYQ
SGMNVTDGQNVGLGQQAGQFVTGTGNSAMGHLAGSTVSGSYNAAFGEYAGTNTSGGANAA
FGFYAGRYINGTNTALGAYDLPVVNGTWYGSYVTGSNNLGAGHNSGAYVSGASNVGLGD
GAGTFVTGSNNVAIGTAAGSGAYTSGPSGATLNAALVASNTVSIQTRATASQSDAIAIGKAT
ASGAQSIGTGNVSVGKGSAGIDPSTVSGAGSYSIGNNNTVANSNTFVLGNGVTTTQDNSV
VL

BPSL2063_{D2}:

MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDHPTIDPKTGAVTAPSYTVYNADGTTSNV
GNVGAIDAINSTGIKYFHANSTKPDSQALGADSV AIGPNAVANNAGDVALGSGAVTSQAGG
TLSETINGVTYSFAGTTPIGTVSVGAPGVERTITNVAAGRIGQSSTDAINGSQLYGTNQSIEALT
DKMNSLGNTVANTLGSGASYNPQTGAVNGPANS GG VVTPTVIQEAANKWVSANPSTYVAPV
ATGTNGMAVGS GAVSTGQNSVALGTNASDGRSNVSVGAPGAERQVTNVAAGTQATDAV
NLGQMNGALAQQTDSFNQRLGAVQQDVDNVARAA YGGIAAATALTMPEVDKD

BPSL2520 Forward primer: **CATATGGCGCAATCGCTGTCGAACCAGA**

BPSL2520 Reverse primer: **GGATCCTTACTTGCCCGGCTTGACCG**

Expression vector: pET14-b (Novagen)

Expression host: C41 (DE3) pLysS *E. coli* cells

Complete amino acid sequence of the construct produced:

MGSSHHHHHSSGLVPRGSHMAQSLSNQTSAPAAA PIDAD KKA AIKDLLD AIDAPKLVSA I
ANSAEMQSK QLVPAILSDA LSENKTLNDK QKQAAVPTLQ KNAVPKLV DG AGKVFGTQQF
TNDAMQAQYD AYAKYYSTSE IKDLTTFYKS PTGRKFIQVQ DQVGRDVVNG LMQKYMPQA
IKATRDQADKE VAAVKPGK

BPSL2063_{XTAL} Forward primer: **CGGGATCCATGGCGCCGACGACGCCCAACG**

BPSL2063_{XTAL} Reverse primer: **GCGAATTC CCGCCGTT CATCTGCCCGAGGTTC**

Expression vector: pET21-b (Novagen)

Expression host: BL21 (DE3) Star *E. coli* cells

Complete amino acid sequence of the construct produced:

*MASMTGGQQMGRGSMAPTPNGGKPSQDLTLVGAASGPVALHNVAPGTASTDAVNNGQLGA
VTTGLGGGAAIDPKTGAVTAPSYTVYNADGTTSNVGNVGAIDAINSTGIKYFHANSTKPDSQ
ALGADSVAIGPNAVANNAGDVALGSGAVTSQAGGTLSETINGVTYSFAGTTPIGTVSVGAPGV
ERTITNVAAGRIGQSSTDAINGSQLYGTNQSIEALTDKMNSLGNTVANTLGSGASYNPQTGAV
NGPANS GG VV TPTVIQEAANKWVSANPSTYVAPVATGTNGMAVGSGAVSTGQNSVALGTNA
SDGGRSNVSVGAPGAERQVTNVAAGTQATDAVN LGQMNGGNSSSVDKLAAALEHHHHHH*

Table S2 Crystallization of BPSL2063_{XTAL}

Method: Sitting drop vapour diffusion

Plate type: CrystalQuick 96 Well Sitting Drop Plate (Greiner)

Temperature: 293K

Protein concentration: 3.5 mg/ml

Buffer composition of protein solution:

10 mM Tris-HCl pH 8.0

Composition of reservoir solution: 0.1M Malic acid, MES and Tris-HCl (MMT) buffer pH 4.0, 25% PEG1500

Volume and ratio of drop: 400 nl (70% protein)

Volume of reservoir: 100 μ l

Table S3 Data collection and processing from a single BPSL2063_{XTAL} crystal

Values for the outer shell are given in parentheses.

Diffraction source:	Beamline ID23-2, ESRF (Grenoble, France)
Wavelength (Å)	0.87290
Temperature (K)	100
Detector	CCD (MarMosaic 225)
Crystal-detector distance (mm)	223.94
Rotation range per image (°)	0.65
Total rotation range (°)	227.5
Space group	P2 ₁
<i>a</i> , <i>b</i> , <i>c</i> (Å)	63.0, 58.7, 74.4
α , β , γ (°)	90.0, 104.6 90.0
Mosaicity (°)	0.17
Resolution range (Å)	40-1.8 (1.9-1.8)
Total No. of reflections	224927 (23959)
No. of unique reflections	48598 (6612)
Completeness (%)	99.0 (93.3)
Redundancy	4.6 (3.6)
$\langle I/\sigma(I) \rangle$	14.8 (2.6)
<i>R</i> _{r.i.m.}	0.085 (0.489)
Overall <i>B</i> factor from Wilson plot (Å ²)	13.7

Table S4 Structure solution and refinement for BPSL2063_{XTAL}

Values for the outer shell are given in parentheses.

Resolution range (Å)	39.7-1.8 (1.8347 - 1.8001)
Completeness (%)	98.9 (88)
σ cutoff	2
No. of reflections, working set	46120
No. of reflections, test set	2462
Final R_{cryst}	16.8
Final R_{free}	20.4
Cruickshank DPI	0.18
No. of non-H atoms	
Protein	4291
Magnesium Ion	7
Water	448
Total	4746
R.m.s. deviations	
Bonds (Å)	0.007
Angles (°)	1.022
Average B factors (Å ²)	
Protein	20.6
Magnesium ions	24.4

Water	24.5
Ramachandran plot	
Most favoured (%)	98.6
Allowed (%)	100

Table S5 List of genes belonging to chromosome I with a mean_depth > 1

chr	start	end	locus_tag	strand	gene_coverage	mean_depth	peak_start	peak_end
gi_52208053_emb_BX571965	3758107	3759573	gltD	-	0.43588	726.706	3758934	3759573
gi_52208053_emb_BX571965	1883679	1884209	BPSL1626	+	1	342.309	1883679	1884209
gi_52208053_emb_BX571965	2220192	2220986	BPSL1867	+	0.656171	109.177	2220192	2220713
gi_52208053_emb_BX571965	504599	505570	BPSL0467	+	0.403708	84.7245	504599	504991
gi_52208053_emb_BX571965	3986567	3989494	gcvP	+	0.22412	69.9268	3988838	3989494
gi_52208053_emb_BX571965	2641055	2642704	BPSL2200	-	0.136446	66.9911	2641055	2641280
gi_52208053_emb_BX571965	3008637	3009125	lrp	-	0.704918	64.1221	3008781	3009125
gi_52208053_emb_BX571965	3087604	3088743	BPSL2559	+	0.341528	63.9126	3087604	3088394
gi_52208053_emb_BX571965	1732557	1733057	BPSL1494	-	0.378	60.4444	1732868	1733057
gi_52208053_emb_BX571965	503530	504348	BPSL0466	+	1	54.3301	503530	504348
gi_52208053_emb_BX571965	2640218	2640919	BPSL2199	-	0.850214	48.4648	2640323	2640919
gi_52208053_emb_BX571965	3086825	3087088	BPSL2558	+	0.395437	44.6635	3086984	3087088
gi_52208053_emb_BX571965	223564	223818	BPSL0214	+	0.555118	43.1844	223677	223818
gi_52208053_emb_BX571965	1724107	1724802	BPSL1486	-	0.351079	43.0697	1724558	1724802
gi_52208053_emb_BX571965	3714325	3714939	BPSL3109	+	0.285016	35.3771	3714325	3714500
gi_52208053_emb_BX571965	481272	482030	BPSL0441	-	0.653034	33.7434	481294	481789
gi_52208053_emb_BX571965	2282088	2283647	emrB	+	0.118024	32.6576	2283345	2283529
gi_52208053_emb_BX571965	2219044	2220072	pyrD	+	0.213035	31.242	2219853	2220072
gi_52208053_emb_BX571965	2804238	2805227	BPSL2322	-	0.651163	30.1134	2804345	2804989
gi_52208053_emb_BX571965	2143834	2144346	BPSL1801	-	0.814453	29.7986	2143929	2144346
gi_52208053_emb_BX571965	2162248	2163822	BPSL1815	-	0.495553	29.7359	2162543	2163323
gi_52208053_emb_BX571965	223950	224993	BPSL0215	+	0.439118	29.3341	223950	224408
gi_52208053_emb_BX571965	3713279	3713950	BPSL3108	-	0.704918	29.186	3713477	3713950
gi_52208053_emb_BX571965	1023539	1024744	BPSL0882	-	0.248963	25.6933	1023539	1023839
gi_52208053_emb_BX571965	1299323	1301113	BPSL1118	+	0.506145	24.1843	1299687	1300727
gi_52208053_emb_BX571965	1804461	1805555	potF	+	0.456124	23.7756	1804461	1804960
gi_52208053_emb_BX571965	3439438	3440016	BPSL2874	-	0.99481	22.647	3439441	3440016
gi_52208053_emb_BX571965	1733194	1734456	rho	-	0.16878	21.2207	1733194	1733407
gi_52208053_emb_BX571965	794567	795328	BPSL0697	-	0.609724	20.5453	794864	795328
gi_52208053_emb_BX571965	1961961	1963346	BPSL1681	+	0.32491	18.7022	1962097	1962547
gi_52208053_emb_BX571965	3764662	3765375	BPSL3160	-	0.535764	18.4869	3764993	3765375
gi_52208053_emb_BX571965	4051535	4052692	BPSL3412	-	0.313742	18.2397	4052329	4052692
gi_52208053_emb_BX571965	3617871	3619031	BPSL3036	+	0.357759	18.012	3617871	3618286
gi_52208053_emb_BX571965	1308976	1309356	BPSL1125	+	0.0131579	18	1308976	1308981
gi_52208053_emb_BX571965	1581044	1581547	BPSL1353	+	0.856859	17.9118	1581044	1581475
gi_52208053_emb_BX571965	3021173	3022075	cysM	-	0.568736	17.4951	3021562	3022075
gi_52208053_emb_BX571965	2247791	2249182	BPSL1887	-	0.140187	16.4923	2247791	2247986
gi_52208053_emb_BX571965	3731572	3732354	tatC	-	0.703325	16.2491	3731603	3732153
gi_52208053_emb_BX571965	2843904	2846192	BPSL2351	+	0.189685	16.2189	2843904	2844338
gi_52208053_emb_BX571965	4020565	4021704	BPSL3388	-	0.102722	15.7094	4021587	4021704
gi_52208053_emb_BX571965	1725071	1725565	BPSL1487	+	0.159919	15.6203	1725071	1725273
gi_52208053_emb_BX571965	1262824	1264374	BPSL1093	+	0.143871	15.1345	1263554	1263777
gi_52208053_emb_BX571965	3879171	3879950	BPSL3263	-	1	14.896	3879171	3879950
gi_52208053_emb_BX571965	4013381	4014175	BPSL3383	-	0.0944584	14.6933	4014056	4014131
gi_52208053_emb_BX571965	3036533	3039133	gyrA	-	0.193846	14.6171	3036533	3037037
gi_52208053_emb_BX571965	2271756	2274620	sucA	-	0.257682	14.2561	2272662	2273400
gi_52208053_emb_BX571965	958008	958883	BPSL0824	-	0.008	14	958876	958883
gi_52208053_emb_BX571965	2863293	2864489	BPSL2368	+	0.359532	13.9442	2863293	2863723
gi_52208053_emb_BX571965	497056	497769	BPSL0459	+	0.2777	13.702	497056	497254
gi_52208053_emb_BX571965	602532	606566	BPSL0548	+	0.144769	13.4589	604251	606566
gi_52208053_emb_BX571965	359487	361604	plcN2	-	0.348607	13.3252	360861	361599
gi_52208053_emb_BX571965	138897	139754	BPSL0124	+	0.123687	13.1132	138897	139003
gi_52208053_emb_BX571965	4041903	4043054	BPSL3404	-	0.338836	12.7974	4042163	4042553
gi_52208053_emb_BX571965	3696333	3696911	BPSL3096	+	0.178201	12.699	3696333	3696436
gi_52208053_emb_BX571965	3022087	3022398	BPSL2507A	-	0.115756	12.4722	3022087	3022123
gi_52208053_emb_BX571965	2514194	2514919	ompR	+	0.481379	12.4097	2514194	2514543

gi_52208053_emb_BX571965	4053013	4054248	BPSL3413	-	0.0890688	12.0364	4053013	4053123
gi_52208053_emb_BX571965	1447136	1448863	BPSL1253	+	0.0127389	12	1447930	1447952
gi_52208053_emb_BX571965	1221524	1221904	BPSL1053	-	0.315789	11.8833	1221784	1221904
gi_52208053_emb_BX571965	2513634	2513972	BPSL2093	-	0.363905	11.7154	2513849	2513972
gi_52208053_emb_BX571965	2104329	2114201	BPSL1778	-	0.0409238	11.5594	2105943	2112636
gi_52208053_emb_BX571965	1752838	1754178	hisS	+	0.0820896	11.3091	1754068	1754178
gi_52208053_emb_BX571965	959141	959605	BPSL0825	-	0.575431	10.5993	959141	959408
gi_52208053_emb_BX571965	92536	93765	intA	+	0.389748	10.5658	93127	93606
gi_52208053_emb_BX571965	2156652	2157467	BPSL1809	-	0.47362	10.3264	2157081	2157467
gi_52208053_emb_BX571965	1953075	1954175	BPSL1674	-	0.337273	10.0135	1953804	1954175
gi_52208053_emb_BX571965	2961030	2962328	BPSL2455	+	0.224961	9.76027	2961866	2962158
gi_52208053_emb_BX571965	1198437	1199537	BPSL1029	-	0.108182	9.31933	1199418	1199537
gi_52208053_emb_BX571965	3861407	3862237	BPSL3249	+	0.428916	9.2809	3861407	3861763
gi_52208053_emb_BX571965	3238401	3239633	BPSL2708	+	0.452922	9.25269	3238401	3238959
gi_52208053_emb_BX571965	107334	107894	speG	+	0.742857	9.04327	107478	107894
gi_52208053_emb_BX571965	1954466	1954945	BPSL1675	-	0.334029	8.75	1954466	1954626
gi_52208053_emb_BX571965	2099061	2104307	BPSL1777	-	0.00686237	8.72222	2101271	2101307
gi_52208053_emb_BX571965	2260493	2260663	BPSL1899	-	1	8.47647	2260493	2260663
gi_52208053_emb_BX571965	1416651	1417913	BPSL1233	+	0.310618	8.2398	1416651	1417043
gi_52208053_emb_BX571965	124499	124783	BPSL0112	-	0.302817	8	124697	124783
gi_52208053_emb_BX571965	607232	607906	BPSL0550	+	0.0296736	8	607232	607252
gi_52208053_emb_BX571965	2566768	2569167	ppsA	-	0.142559	7.98538	2568825	2569167
gi_52208053_emb_BX571965	3261786	3262568	BPSL2726	-	0.450128	7.8267	3262216	3262568
gi_52208053_emb_BX571965	2596711	2598786	ligA	-	0.269398	7.78891	2598167	2598726
gi_52208053_emb_BX571965	2174784	2176310	BPSL1826	-	0.250983	7.6658	2175342	2175725
gi_52208053_emb_BX571965	4011201	4011632	BPSL3379	+	0.62877	7.66421	4011361	4011632
gi_52208053_emb_BX571965	1266656	1267873	BPSL1096	-	0.193098	7.53617	1266885	1267120
gi_52208053_emb_BX571965	3648416	3649153	dsbC	-	0.333786	7.51626	3648907	3649153
gi_52208053_emb_BX571965	2842000	2843166	BPSL2350	+	0.0746141	7.48276	2843079	2843166
gi_52208053_emb_BX571965	1675932	1676660	BPSL1440	+	0.0769231	7.48214	1675932	1675988
gi_52208053_emb_BX571965	690580	693099	BPSL0611	-	0.169115	7.29577	691681	692107
gi_52208053_emb_BX571965	1754231	1754860	BPSL1515	+	0.489666	7.25	1754231	1754539
gi_52208053_emb_BX571965	606593	607069	BPSL0549A	-	1	7.22899	606593	607069
gi_52208053_emb_BX571965	1958040	1959680	BPSL1678	-	0.2	7.05488	1959164	1959492
gi_52208053_emb_BX571965	124780	125262	BPSL0113	-	1	7.0332	124780	125262
gi_52208053_emb_BX571965	84085	85188	dnaN	-	0.517679	6.94046	84377	84948
gi_52208053_emb_BX571965	3880126	3882111	BPSL3264	-	0.0277078	6.92727	3880126	3880181
gi_52208053_emb_BX571965	442663	443874	BPSL0408	+	0.223782	6.87823	443603	443874
gi_52208053_emb_BX571965	1580568	1581044	greA	+	0.201681	6.86458	1580948	1581044
gi_52208053_emb_BX571965	1164723	1165262	BPSL1001	+	0.131725	6.77465	1164821	1164892
gi_52208053_emb_BX571965	407612	409198	BPSL0376	-	0.113493	6.76667	409018	409198
gi_52208053_emb_BX571965	2152309	2152980	amrR	+	0.308495	6.76329	2152309	2152516
gi_52208053_emb_BX571965	2171706	2172752	BPSL1824	-	0.564054	6.74407	2171943	2172533
gi_52208053_emb_BX571965	3634748	3636046	paaA	+	0.410632	6.64916	3635393	3635926
gi_52208053_emb_BX571965	3397539	3399035	tldD	+	0.316176	6.62791	3398504	3399035
gi_52208053_emb_BX571965	327333	330545	silA	+	0.130448	6.58711	327333	330545
gi_52208053_emb_BX571965	2582595	2583986	BPSL2152	-	0.179008	6.51807	2582595	2582844
gi_52208053_emb_BX571965	2246987	2247718	BPSL1886	-	0.556772	6.37838	2247311	2247718
gi_52208053_emb_BX571965	324453	325754	BPSL0307	+	0.269024	6.37429	324700	325050
gi_52208053_emb_BX571965	2591671	2594247	BPSL2161	+	0.173525	6.3736	2593032	2593479
gi_52208053_emb_BX571965	648080	649468	BPSL0584	-	0.154899	6.37209	649253	649468
gi_52208053_emb_BX571965	496759	496968	BPSL0458a	-	0.794258	6.36747	496802	496968
gi_52208053_emb_BX571965	3860137	3861387	BPSL3248	+	0.2576	6.35404	3861065	3861387
gi_52208053_emb_BX571965	3588418	3589029	coaE	+	0.235679	6.30556	3588418	3588562
gi_52208053_emb_BX571965	166687	167049	BPSL0155	-	0.779006	6.2234	166767	167049
gi_52208053_emb_BX571965	1884308	1885078	BPSL1627	+	0.790909	6.15435	1884308	1885078
gi_52208053_emb_BX571965	1767550	1769874	tex	-	0.26506	6.14935	1767672	1768310
gi_52208053_emb_BX571965	3465463	3467028	purH	+	0.208946	6.01223	3465705	3466032

gi_52208053_emb_BX571965	2764077	2765156	BPSL2297	-	0.134384	6	2765011	2765156
gi_52208053_emb_BX571965	757548	759647	glyS	-	0.011434	6	757548	757572
gi_52208053_emb_BX571965	1153273	1157391	BPSL0995	+	0.0531812	5.94977	1157098	1157317
gi_52208053_emb_BX571965	3708183	3710009	BPSL3103	-	0.117744	5.94884	3708254	3708469
gi_52208053_emb_BX571965	3974401	3974607	BPSL3351	-	0.898058	5.82162	3974422	3974607
gi_52208053_emb_BX571965	138152	138787	BPSL0123	+	0.92126	5.8	138152	138787
gi_52208053_emb_BX571965	1416076	1416558	BPSL1231	+	0.338174	5.78528	1416395	1416558
gi_52208053_emb_BX571965	3948263	3949327	BPSL3329	+	0.379699	5.76485	3948556	3948960
gi_52208053_emb_BX571965	2459672	2460508	BPSL2055	-	0.598086	5.756	2459875	2460375
gi_52208053_emb_BX571965	676682	679045	BPSL0602	+	0.186627	5.67347	677749	678862
gi_52208053_emb_BX571965	928931	930127	purK	+	0.496656	5.67003	929168	929843
gi_52208053_emb_BX571965	1242775	1243737	BPSL1074	-	0.75052	5.63573	1242851	1243573
gi_52208053_emb_BX571965	556694	558334	BPSL0507	-	0.432317	5.5275	557157	558022
gi_52208053_emb_BX571965	4002218	4003627	BPSL3373	-	0.300923	5.40566	4002474	4002898
gi_52208053_emb_BX571965	2542680	2543693	BPSL2116	-	0.452122	5.36026	2542885	2543343
gi_52208053_emb_BX571965	3135151	3135831	pgl	+	0.2	5.20588	3135304	3135440
gi_52208053_emb_BX571965	3496763	3498214	purB	+	0.0303239	5.18182	3497572	3497616
gi_52208053_emb_BX571965	491323	492900	BPSL0453	+	0.436271	5.17587	491496	492900
gi_52208053_emb_BX571965	2268814	2270244	odhL	-	0.16993	5.16461	2268814	2269057
gi_52208053_emb_BX571965	2443535	2446870	BPSL2046	-	0.22099	5.16147	2443721	2445684
gi_52208053_emb_BX571965	3583587	3584882	BPSL3007	+	0.400772	5.13487	3584331	3584850
gi_52208053_emb_BX571965	3765568	3766299	BPSL3161	+	0.573187	5.09547	3765568	3765987
gi_52208053_emb_BX571965	581696	582589	BPSL0529	-	0.567749	5.0572	581817	582324
gi_52208053_emb_BX571965	1617923	1618318	BPSL1390	-	0.36962	5	1618172	1618318
gi_52208053_emb_BX571965	3870399	3870716	BPSL3255	-	0.55836	5	3870399	3870576
gi_52208053_emb_BX571965	2507062	2507385	BPSL2087	+	0.544892	4.98864	2507153	2507329
gi_52208053_emb_BX571965	2580221	2582530	BPSL2151	-	0.389779	4.95667	2581630	2582530
gi_52208053_emb_BX571965	4064769	4065299	BPSL3422	+	0.0792453	4.85714	4065048	4065090
gi_52208053_emb_BX571965	1222077	1222616	eco	+	0.44898	4.84711	1222077	1222319
gi_52208053_emb_BX571965	4056656	4057852	BPSL3416	-	0.048495	4.82759	4057159	4057217
gi_52208053_emb_BX571965	585023	586531	rpoN	-	0.234085	4.79037	585529	586345
gi_52208053_emb_BX571965	3858608	3860011	BPSL3247	+	0.645046	4.74033	3858608	3859996
gi_52208053_emb_BX571965	453402	455528	BPSL0419	+	0.0719661	4.56209	453402	453555
gi_52208053_emb_BX571965	1039748	1041862	fusA	-	0.228477	4.53002	1041307	1041790
gi_52208053_emb_BX571965	3587485	3588414	gspO	+	0.345533	4.47664	3588093	3588414
gi_52208053_emb_BX571965	938273	939691	BPSL0808	+	0.284908	4.41584	938823	939621
gi_52208053_emb_BX571965	1410200	1411672	nuoN	+	0.0774457	4.39474	1410532	1410646
gi_52208053_emb_BX571965	2288373	2289848	nusA	-	0.238644	4.3608	2288373	2288725
gi_52208053_emb_BX571965	1320725	1322113	BPSL1136	-	0.0850144	4.32203	1321632	1322113
gi_52208053_emb_BX571965	4043967	4044761	BPSL3406	-	0.115869	4.29348	4044508	4044600
gi_52208053_emb_BX571965	4011732	4012373	BPSL3380	+	0.422777	4.28782	4011732	4012003
gi_52208053_emb_BX571965	2322043	2322948	BPSL1950	-	0.358011	4.25309	2322412	2322736
gi_52208053_emb_BX571965	1917834	1918952	BPSL1655	+	0.242397	4.24723	1917834	1918105
gi_52208053_emb_BX571965	649491	649814	BPSL0585	-	0.74613	4.24066	649491	649732
gi_52208053_emb_BX571965	788147	789820	BPSL0692	+	0.0723252	4.19835	788147	788268
gi_52208053_emb_BX571965	325765	327336	BPSL0308	+	0.189052	4.14478	327039	327336
gi_52208053_emb_BX571965	8395	10668	gspD	+	0.161461	4.11989	8395	8762
gi_52208053_emb_BX571965	482135	483709	BPSL0442	-	0.257942	4.0936	482402	483709
gi_52208053_emb_BX571965	297527	298126	BPSL0284	+	0.717863	4.07674	297641	298084
gi_52208053_emb_BX571965	335475	336470	BPSL0314	-	0.205025	4	335867	336071
gi_52208053_emb_BX571965	951272	952696	BPSL0818	+	0.143961	4	951611	951816
gi_52208053_emb_BX571965	3460103	3460711	BPSL2891	-	0.679276	4	3460103	3460516
gi_52208053_emb_BX571965	4054658	4055635	BPSL3414	-	0.132037	4	4055506	4055635
gi_52208053_emb_BX571965	2616342	2617412	alr	-	0.00186916	4	2617410	2617412
gi_52208053_emb_BX571965	2089148	2090209	hoxN	-	0.206409	4	2089749	2089968
gi_52208053_emb_BX571965	2577091	2577879	lpxA	-	0.28934	4	2577166	2577394
gi_52208053_emb_BX571965	1396791	1397150	nuoA	+	0.445682	4	1396791	1396951
gi_52208053_emb_BX571965	3726251	3727009	petC	-	0.166227	4	3726251	3726377

gi_52208053_emb_BX571965	3792284	3794167	dsbD	-	0.0902815	3.98824	3793900	3794070
gi_52208053_emb_BX571965	1916230	1917690	gabD	+	0.366438	3.98505	1917155	1917690
gi_52208053_emb_BX571965	3178084	3178947	BPSL2654	+	0.223638	3.97409	3178503	3178696
gi_52208053_emb_BX571965	3867516	3867743	BPSL3254A	+	0.255507	3.96552	3867685	3867743
gi_52208053_emb_BX571965	1844497	1845597	BPSL1591	+	0.190909	3.9381	1844497	1844707
gi_52208053_emb_BX571965	330542	330883	BPSL0310	+	0.765396	3.90421	330542	330850
gi_52208053_emb_BX571965	1802768	1804075	BPSL1554	-	0.122418	3.8875	1803765	1804075
gi_52208053_emb_BX571965	409296	409979	BPSL0377	-	0.250366	3.88304	409296	409467
gi_52208053_emb_BX571965	3649246	3650427	BPSL3059	-	0.220999	3.85057	3649246	3649507
gi_52208053_emb_BX571965	1812459	1813862	BPSL1562	+	0.023521	3.81818	1813829	1813862
gi_52208053_emb_BX571965	187471	189927	mrdA	-	0.0350163	3.81395	187471	187557
gi_52208053_emb_BX571965	2246186	2246836	BPSL1885A	+	0.124615	3.71605	2246626	2246707
gi_52208053_emb_BX571965	3933037	3933741	aqpZ	+	0.190341	3.69403	3933037	3933171
gi_52208053_emb_BX571965	2372102	2372983	BPSL1990	-	0.276958	3.65574	2372734	2372978
gi_52208053_emb_BX571965	3411269	3412264	phnD	-	0.443216	3.64399	3411823	3412264
gi_52208053_emb_BX571965	2467978	2471250	BPSL2063	-	0.121944	3.63409	2470851	2471250
gi_52208053_emb_BX571965	751131	752180	pdxA	+	0.239276	3.57769	751495	751746
gi_52208053_emb_BX571965	349356	350318	BPSL0327	+	0.288981	3.54317	349928	350206
gi_52208053_emb_BX571965	551745	553340	cydA	-	0.520376	3.52651	552399	553229
gi_52208053_emb_BX571965	3974691	3974993	BPSL3352	-	0.758278	3.50655	3974691	3974920
gi_52208053_emb_BX571965	3851722	3853992	BPSL3242	-	0.100441	3.48684	3853005	3853233
gi_52208053_emb_BX571965	1021502	1022770	BPSL0881	+	0.044164	3.48214	1022293	1022349
gi_52208053_emb_BX571965	1569365	1571026	BPSL1345	+	0.130644	3.45161	1569365	1569582
gi_52208053_emb_BX571965	4055632	4056516	BPSL3415	-	0.154977	3.37956	4055632	4055769
gi_52208053_emb_BX571965	2782966	2784246	BPSL2307	+	0.138281	3.34463	2784060	2784237
gi_52208053_emb_BX571965	3301256	3302281	tolA	+	0.609756	3.336	3301577	3302281
gi_52208053_emb_BX571965	376064	377755	BPSL0353	+	0.33767	3.32574	376088	376659
gi_52208053_emb_BX571965	3888677	3889477	BPSL3272	-	0.10625	3.29412	3889291	3889376
gi_52208053_emb_BX571965	3235340	3236938	BPSL2706	-	0.31602	3.29109	3235340	3236938
gi_52208053_emb_BX571965	302370	303203	BPSL0290	-	0.151261	3.28571	302935	303194
gi_52208053_emb_BX571965	1176147	1177136	BPSL1010	+	0.22548	3.27803	1176147	1176370
gi_52208053_emb_BX571965	1063873	1065069	BPSL0911	+	0.48913	3.2735	1064012	1064597
gi_52208053_emb_BX571965	1408685	1410175	nuoM	+	0.291946	3.22529	1408781	1409216
gi_52208053_emb_BX571965	3237675	3238121	BPSL2707	-	0.701794	3.17891	3237808	3238121
gi_52208053_emb_BX571965	3659704	3661371	BPSL3067	+	0.20036	3.17365	3659943	3660281
gi_52208053_emb_BX571965	3422301	3423251	ubiA	-	0.264211	3.13944	3422690	3422941
gi_52208053_emb_BX571965	834328	835428	BPSL0725	+	0.0672727	3.13514	834804	834878
gi_52208053_emb_BX571965	1640747	1642681	BPSL1410	+	0.356256	3.12046	1641514	1642203
gi_52208053_emb_BX571965	838970	840907	BPSL0729	-	0.186887	3.11326	840326	840688
gi_52208053_emb_BX571965	2930286	2931314	BPSL2424	-	0.41537	3.10539	2930330	2930757
gi_52208053_emb_BX571965	2077979	2079352	BPSL1763	+	0.325564	3.08501	2078025	2078472
gi_52208053_emb_BX571965	3035838	3036434	BPSL2520	-	0.954698	3.07381	3035865	3036434
gi_52208053_emb_BX571965	160948	162120	BPSL0150	-	0.0460751	3	161464	161518
gi_52208053_emb_BX571965	206377	207180	BPSL0199	-	0.13076	3	206647	206752
gi_52208053_emb_BX571965	654016	660111	BPSL0590	-	0.0841674	3	656517	657922
gi_52208053_emb_BX571965	1482263	1482442	BPSL1279	+	0.027933	3	1482263	1482268
gi_52208053_emb_BX571965	1719333	1719875	BPSL1482	-	0.103321	3	1719819	1719875
gi_52208053_emb_BX571965	2050380	2051318	BPSL1739	+	0.168443	3	2050380	2050538
gi_52208053_emb_BX571965	2161256	2162251	BPSL1814	-	0.106533	3	2161523	2161629
gi_52208053_emb_BX571965	2663718	2664812	BPSL2219	-	0.0996344	3	2664656	2664765
gi_52208053_emb_BX571965	3006869	3007336	BPSL2494	+	0.411135	3	3006869	3007061
gi_52208053_emb_BX571965	3440083	3440643	BPSL2875	-	0.167857	3	3440083	3440177
gi_52208053_emb_BX571965	3771626	3772858	BPSL3167	-	0.0592532	3	3771626	3771699
gi_52208053_emb_BX571965	572627	573232	pth	-	0.350413	3	572789	573001
gi_52208053_emb_BX571965	2193033	2194016	sbp	-	0.0335707	3	2193983	2194016
gi_52208053_emb_BX571965	2359584	2362451	valS	+	0.105337	2.99669	2361188	2361490
gi_52208053_emb_BX571965	186311	187459	rodA	-	0.144599	2.98795	187293	187459
gi_52208053_emb_BX571965	668159	672238	BPSL0597	+	0.0272126	2.98198	671439	671550

gi_52208053_emb_BX571965	1946220	1947071	BPSL1668	+	0.190364	2.98148	1946566	1946728
gi_52208053_emb_BX571965	1632520	1633812	clpX	+	0.123839	2.96875	1633288	1633448
gi_52208053_emb_BX571965	2805244	2806236	BPSL2323	-	0.363911	2.95845	2805589	2805950
gi_52208053_emb_BX571965	3725547	3726158	BPSL3120	-	0.368249	2.95556	3725933	3726158
gi_52208053_emb_BX571965	988966	989481	BPSL0850	-	0.0815534	2.95238	989191	989233
gi_52208053_emb_BX571965	12163	13380	gspF	+	0.0254725	2.93548	13197	13228
gi_52208053_emb_BX571965	3492208	3493512	BPSL2925	-	0.33819	2.91156	3492648	3493089
gi_52208053_emb_BX571965	3226050	3228209	BPSL2699	-	0.250116	2.90556	3226781	3227907
gi_52208053_emb_BX571965	2259910	2260410	BPSL1898	-	0.3	2.9	2260260	2260410
gi_52208053_emb_BX571965	918996	920036	waaF	-	0.293269	2.89836	919650	919955
gi_52208053_emb_BX571965	1256635	1258104	BPSL1086	+	0.0422056	2.8871	1257031	1257093
gi_52208053_emb_BX571965	3791004	3792068	hemB	+	0.202068	2.88372	3791180	3791536
gi_52208053_emb_BX571965	2328707	2330239	BPSL1957	+	0.165796	2.87402	2328719	2328973
gi_52208053_emb_BX571965	1201221	1201934	hisM	-	0.102384	2.86301	1201221	1201294
gi_52208053_emb_BX571965	167900	168658	BPSL0157	+	0.496042	2.84043	167900	168658
gi_52208053_emb_BX571965	2373228	2374277	BPSL1991	+	0.0686368	2.83333	2373228	2373658
gi_52208053_emb_BX571965	2882521	2883984	astD	-	0.120984	2.82486	2882914	2883091
gi_52208053_emb_BX571965	1765422	1767314	kup	+	0.0882664	2.78443	1765467	1765634
gi_52208053_emb_BX571965	3816188	3820426	rpoC	-	0.170363	2.77147	3816632	3818395
gi_52208053_emb_BX571965	167046	167726	BPSL0156	-	0.704412	2.75574	167046	167726
gi_52208053_emb_BX571965	1675112	1675921	BPSL1439	+	0.443758	2.74373	1675562	1675921
gi_52208053_emb_BX571965	3208351	3209760	wzt	-	0.217175	2.72876	3209393	3209699
gi_52208053_emb_BX571965	756967	757530	BPSL0666	-	0.934281	2.72624	757004	757530
gi_52208053_emb_BX571965	1712067	1713305	BPSL1476	+	0.271405	2.70833	1712967	1713303
gi_52208053_emb_BX571965	1763184	1764530	purA	+	0.347697	2.69872	1764010	1764478
gi_52208053_emb_BX571965	2058928	2059722	BPSL1746	-	0.574307	2.66886	2058990	2059446
gi_52208053_emb_BX571965	1922210	1923109	BPSL1659	+	0.0767519	2.66667	1922586	1922655
gi_52208053_emb_BX571965	1375457	1376395	BPSL1191	-	0.319829	2.65667	1376095	1376395
gi_52208053_emb_BX571965	2260771	2260908	BPSL1900	-	1	2.64234	2260771	2260908
gi_52208053_emb_BX571965	1856701	1856970	BPSL1602	-	0.784387	2.63507	1856706	1856917
gi_52208053_emb_BX571965	284510	285751	flgE	+	0.483481	2.62167	284803	285403
gi_52208053_emb_BX571965	1494163	1496859	BPSL1284	+	0.0563798	2.59868	1496637	1496789
gi_52208053_emb_BX571965	1914372	1915463	BPSL1652	+	0.373969	2.59314	1914448	1914937
gi_52208053_emb_BX571965	3820448	3824554	rpoB	-	0.322942	2.5641	3820689	3823228
gi_52208053_emb_BX571965	3162211	3163431	BPSL2639	+	0.34918	2.56338	3162211	3163413
gi_52208053_emb_BX571965	844113	845339	BPSL0731	+	0.509788	2.5552	844639	845264
gi_52208053_emb_BX571965	2168604	2168795	BPSL1821	-	0.183246	2.54286	2168664	2168699
gi_52208053_emb_BX571965	26223	26621	BPSL0024	+	0.836683	2.51952	26288	26621
gi_52208053_emb_BX571965	1571107	1572399	BPSL1346	+	0.128483	2.50602	1571815	1572369
gi_52208053_emb_BX571965	3519305	3520240	cynR	-	0.494118	2.45238	3519387	3519849
gi_52208053_emb_BX571965	168655	168801	BPSL0158	-	1	2.43151	168655	168801
gi_52208053_emb_BX571965	2571036	2572925	BPSL2142	-	0.140815	2.33083	2571247	2572333
gi_52208053_emb_BX571965	1431768	1433301	BPSLr01	+	0.524462	2.30721	1432066	1433298
gi_52208053_emb_BX571965	3951436	3952059	BPSL3332	+	0.691814	2.29466	3951436	3951867
gi_52208053_emb_BX571965	2968219	2969418	BPSL2462	-	0.237698	2.29123	2968776	2969061
gi_52208053_emb_BX571965	2491542	2493650	BPSL2077	+	0.127609	2.27881	2492632	2492901
gi_52208053_emb_BX571965	3538396	3539400	araH	-	0.11753	2.25424	3539168	3539286
gi_52208053_emb_BX571965	3976225	3977124	BPSL3354	+	0.202447	2.24725	3976456	3976638
gi_52208053_emb_BX571965	2374378	2375523	BPSL1992	+	0.627074	2.22423	2374667	2375385
gi_52208053_emb_BX571965	1568475	1569281	BPSL1344	+	0.141439	2.2193	1569167	1569281
gi_52208053_emb_BX571965	649836	650156	BPSL0586	-	0.75	2.21667	649916	650156
gi_52208053_emb_BX571965	32169	32951	fliR	+	0.533248	2.21583	32471	32888
gi_52208053_emb_BX571965	3623873	3626754	BPSLr05	-	0.492884	2.20493	3623892	3626602
gi_52208053_emb_BX571965	2049223	2050383	BPSL1738	+	0.231034	2.1791	2050115	2050383
gi_52208053_emb_BX571965	2773508	2776048	BPSL2302	+	0.10315	2.17176	2774038	2774701
gi_52208053_emb_BX571965	3997868	3999388	acoD	+	0.348684	2.1717	3998265	3998795
gi_52208053_emb_BX571965	2846670	2847803	BPSL2354	+	0.149162	2.1716	2847027	2847196
gi_52208053_emb_BX571965	1654568	1655347	BPSL1418	-	0.385109	2.16667	1655047	1655347

gi_52208053_emb_BX571965	1938631	1940046	BPSL1665	+	0.409187	2.14853	1938655	1939234
gi_52208053_emb_BX571965	94413	97280	BPSL0082	-	0.133938	2.14583	95111	95495
gi_52208053_emb_BX571965	3745813	3746445	BPSL3146	-	0.634494	2.1197	3745855	3746445
gi_52208053_emb_BX571965	3946865	3947629	BPSL3327	+	0.265707	2.09852	3946865	3947068
gi_52208053_emb_BX571965	1396551	1396635	BPSLt07	+	1	2.09524	1396551	1396635
gi_52208053_emb_BX571965	3722117	3724717	BPSL3118	-	0.0392308	2.08824	3722759	3722861
gi_52208053_emb_BX571965	26690	27412	BPSL0025	+	0.621884	2.06682	26690	27189
gi_52208053_emb_BX571965	2519326	2522895	mfd	+	0.182404	2.04608	2520520	2522645
gi_52208053_emb_BX571965	3234027	3235280	BPSL2705	-	0.243416	2.03934	3234939	3235280
gi_52208053_emb_BX571965	3498867	3500228	BPSL2930	-	0.351947	2.0334	3499252	3500144
gi_52208053_emb_BX571965	38176	39555	BPSL0039	+	0.116751	2	38785	38946
gi_52208053_emb_BX571965	42169	44181	BPSL0042	+	0.0487078	2	43825	43923
gi_52208053_emb_BX571965	114323	115771	BPSL0103	-	0.019337	2	114387	114415
gi_52208053_emb_BX571965	243932	245443	BPSL0234	+	0.0152217	2	243932	243955
gi_52208053_emb_BX571965	443964	444911	BPSL0409	+	0.0834213	2	443964	444043
gi_52208053_emb_BX571965	615702	616079	BPSL0562	+	0.066313	2	615702	615727
gi_52208053_emb_BX571965	797270	798418	BPSL0699	-	0.157666	2	797854	798035
gi_52208053_emb_BX571965	864580	865065	BPSL0749	+	0.0824742	2	864981	865021
gi_52208053_emb_BX571965	867220	868476	BPSL0751	+	0.123408	2	868104	868259
gi_52208053_emb_BX571965	990788	991951	BPSL0852	-	0.0189166	2	991381	991403
gi_52208053_emb_BX571965	1001125	1002354	BPSL0861	+	0.187144	2	1001962	1002192
gi_52208053_emb_BX571965	1102333	1105446	BPSL0945	-	0.0848057	2	1104394	1104658
gi_52208053_emb_BX571965	1189316	1190755	BPSL1020	-	0.0750521	2	1190647	1190755
gi_52208053_emb_BX571965	1217526	1218953	BPSL1048	-	0.0133146	2	1217633	1217652
gi_52208053_emb_BX571965	1270430	1270789	BPSL1099	+	0.651811	2	1270555	1270789
gi_52208053_emb_BX571965	1792027	1792722	BPSL1546	-	0.23741	2	1792557	1792722
gi_52208053_emb_BX571965	1808802	1809608	BPSL1559	-	0.0136476	2	1809597	1809608
gi_52208053_emb_BX571965	1809648	1811318	BPSL1560	-	0.134132	2	1809648	1809872
gi_52208053_emb_BX571965	1858341	1859255	BPSL1605	-	0.0634573	2	1858365	1858423
gi_52208053_emb_BX571965	2244462	2245421	BPSL1884	+	0.0437956	2	2244803	2244845
gi_52208053_emb_BX571965	2778566	2780665	BPSL2305	+	0.0138161	2	2780318	2780347
gi_52208053_emb_BX571965	2949664	2950296	BPSL2445	-	0.360759	2	2949927	2950155
gi_52208053_emb_BX571965	3288720	3289544	BPSL2746	-	0.268204	2	3288720	3288941
gi_52208053_emb_BX571965	3892896	3893540	BPSL3277	+	0.0372671	2	3893509	3893533
gi_52208053_emb_BX571965	3945804	3946868	BPSL3326	+	0.0516917	2	3946813	3946868
gi_52208053_emb_BX571965	2395633	2398257	alaS	-	0.0121951	2	2397697	2397729
gi_52208053_emb_BX571965	3790127	3790786	engB	+	0.180577	2	3790127	3790246
gi_52208053_emb_BX571965	2973705	2975111	norM	+	0.0384068	2	2974244	2974298
gi_52208053_emb_BX571965	1237506	1239824	parC	+	0.101812	2	1238018	1238254
gi_52208053_emb_BX571965	1391849	1393990	pnp	+	0.151331	2	1391849	1392173
gi_52208053_emb_BX571965	3505156	3506427	proA	-	0.154209	2	3505913	3506109
gi_52208053_emb_BX571965	3977437	3979524	rep	-	0.0699569	2	3977437	3977583
gi_52208053_emb_BX571965	2201328	2202380	BPSL1848	-	0.372624	1.9949	2201619	2202011
gi_52208053_emb_BX571965	2785926	2789651	narG	+	0.0397315	1.99324	2787695	2787843
gi_52208053_emb_BX571965	3125983	3126945	trxB	+	0.16632	1.98125	3125994	3126154
gi_52208053_emb_BX571965	2425438	2425998	BPSL2030	-	0.185714	1.98077	2425495	2425599
gi_52208053_emb_BX571965	1792856	1795330	BPSL1547	+	0.0578011	1.97902	1794477	1794620
gi_52208053_emb_BX571965	259630	261258	dppA	+	0.369165	1.97504	259630	260456
gi_52208053_emb_BX571965	463292	465325	dctB	+	0.0383669	1.96154	464468	464546
gi_52208053_emb_BX571965	922908	924101	pgk	+	0.165968	1.9596	922922	923120
gi_52208053_emb_BX571965	1502063	1503994	thiC	-	0.215432	1.95673	1502714	1503130
gi_52208053_emb_BX571965	1056325	1059162	ileS	-	0.0398308	1.95575	1058210	1058323
gi_52208053_emb_BX571965	731943	733217	BPSL0646	+	0.293564	1.94118	732798	733217
gi_52208053_emb_BX571965	1989929	1992244	BPSL1707	+	0.133477	1.93204	1989940	1990249
gi_52208053_emb_BX571965	1982643	1987463	BPSL1705	+	0.321162	1.927	1982643	1986955
gi_52208053_emb_BX571965	3845771	3846868	BPSL3239	+	0.200547	1.89545	3845771	3845991
gi_52208053_emb_BX571965	3704416	3707085	clpB	-	0.302281	1.87925	3706702	3706921
gi_52208053_emb_BX571965	3634318	3634710	paal	+	0.686224	1.87361	3634390	3634659

gi_52208053_emb_BX571965	2639117	2640052	BPSL2198	+	0.247059	1.87013	2639437	2639668
gi_52208053_emb_BX571965	3276352	3277521	BPSL2736	+	0.216424	1.86166	3276734	3276987
gi_52208053_emb_BX571965	1573867	1574889	BPSL1348	+	0.203523	1.85577	1574135	1574343
gi_52208053_emb_BX571965	3831184	3834065	BPSLr08	-	0.619577	1.8549	3831335	3833581
gi_52208053_emb_BX571965	3516422	3517744	dctA	-	0.0907716	1.85	3517055	3517175
gi_52208053_emb_BX571965	3707119	3708219	BPSL3102	-	0.219091	1.82158	3707491	3707732
gi_52208053_emb_BX571965	3302378	3303679	tolB	+	0.0668716	1.8046	3302406	3302718
gi_52208053_emb_BX571965	2873931	2875937	cyoB	+	0.232802	1.79443	2874899	2875366
gi_52208053_emb_BX571965	3834667	3836200	BPSLr09	-	0.547945	1.79405	3834785	3836195
gi_52208053_emb_BX571965	3507704	3508255	BPSL2937	-	0.257713	1.78169	3507808	3507950
gi_52208053_emb_BX571965	1045618	1047237	BPSL0897	+	0.0704138	1.7807	1046900	1047014
gi_52208053_emb_BX571965	3130793	3131731	BPSL2610	-	0.602345	1.77168	3130794	3131359
gi_52208053_emb_BX571965	104028	104915	BPSL0092	-	0.289741	1.74708	104187	104444
gi_52208053_emb_BX571965	912788	913261	BPSL0784	+	0.116279	1.74545	913058	913113
gi_52208053_emb_BX571965	1311772	1312755	BPSL1128	-	0.0508647	1.74	1312271	1312321
gi_52208053_emb_BX571965	2019273	2021957	BPSL1715	-	0.0372578	1.74	2021857	2021957
gi_52208053_emb_BX571965	1583196	1585082	ftsH	+	0.241251	1.73846	1583723	1584253
gi_52208053_emb_BX571965	3770216	3771541	BPSL3166	-	0.146415	1.73711	3771327	3771541
gi_52208053_emb_BX571965	1270830	1271198	BPSL1100	+	0.350543	1.71318	1270830	1270959
gi_52208053_emb_BX571965	1472111	1474072	BPSL1270	-	0.350841	1.71221	1472794	1473814
gi_52208053_emb_BX571965	786186	786557	BPSL0689	+	0.185984	1.71014	786262	786331
gi_52208053_emb_BX571965	1213901	1215319	otsA	+	0.350494	1.70221	1214610	1215151
gi_52208053_emb_BX571965	2262967	2264232	BPSL1902	+	0.319368	1.69802	2263508	2264232
gi_52208053_emb_BX571965	4061811	4063337	msdA	-	0.136304	1.69712	4062904	4063112
gi_52208053_emb_BX571965	2536505	2537434	BPSL2111	+	0.0947255	1.68182	2536578	2536666
gi_52208053_emb_BX571965	2070286	2071377	cbiD	-	0.202566	1.66063	2070901	2071122
gi_52208053_emb_BX571965	3428080	3429039	oxyR	-	0.118874	1.65789	3428145	3428259
gi_52208053_emb_BX571965	718126	722205	BPSL0634	+	0.115469	1.64968	718728	719289
gi_52208053_emb_BX571965	947371	948915	oprB	+	0.151554	1.64957	947371	948292
gi_52208053_emb_BX571965	4014229	4015419	BPSL3384	-	0.257983	1.63192	4014629	4014936
gi_52208053_emb_BX571965	2306519	2308639	BPSL1937	+	0.126415	1.6306	2306983	2308217
gi_52208053_emb_BX571965	2628947	2629849	BPSL2190	-	0.168514	1.625	2629566	2629718
gi_52208053_emb_BX571965	1418190	1419416	BPSL1234	-	0.0668842	1.62195	1418769	1418851
gi_52208053_emb_BX571965	1547220	1549085	pckG	+	0.183914	1.61224	1547220	1548932
gi_52208053_emb_BX571965	3627356	3628889	BPSLr06	-	0.657534	1.60218	3627399	3628606
gi_52208053_emb_BX571965	1036989	1038575	BPSL0892a	-	0.309584	1.58859	1037597	1038575
gi_52208053_emb_BX571965	1885085	1887637	BPSL1628	+	0.106583	1.58088	1885085	1885357
gi_52208053_emb_BX571965	3599162	3600358	ftsZ	-	0.177258	1.5566	3599996	3600208
gi_52208053_emb_BX571965	886079	889639	BPSL0765	+	0.0202247	1.55556	886600	887008
gi_52208053_emb_BX571965	3874162	3876582	BPSL3258	+	0.287603	1.55172	3874647	3875578
gi_52208053_emb_BX571965	1925148	1934837	BPSL1661	+	0.0603777	1.54701	1928687	1932941
gi_52208053_emb_BX571965	555370	555939	BPSL0505	+	0.318102	1.52486	555468	555649
gi_52208053_emb_BX571965	3233125	3234030	BPSL2704	-	0.474033	1.52448	3233554	3233983
gi_52208053_emb_BX571965	1895929	1899177	BPSL1634	+	0.135468	1.51136	1898345	1898838
gi_52208053_emb_BX571965	1998620	2017444	BPSL1712	-	0.0101466	1.46597	2012317	2013136
gi_52208053_emb_BX571965	2426051	2426596	BPSL2031	-	0.350459	1.46073	2426051	2426426
gi_52208053_emb_BX571965	3746560	3747570	BPSL3147	-	0.222772	1.45778	3746560	3746962
gi_52208053_emb_BX571965	3382564	3383121	BPSL2829	-	0.0628366	1.45714	3383086	3383121
gi_52208053_emb_BX571965	293438	294670	flgL	+	0.353084	1.44368	293488	293923
gi_52208053_emb_BX571965	1940157	1944521	BPSL1666	+	0.0659945	1.44097	1940357	1941333
gi_52208053_emb_BX571965	69196	70401	BPSL0062	+	0.0755187	1.43956	70052	70143
gi_52208053_emb_BX571965	3561445	3562383	BPSL2988	+	0.51919	1.43121	3561749	3562349
gi_52208053_emb_BX571965	1872876	1874255	BPSL1616	-	0.158086	1.41743	1872876	1873094
gi_52208053_emb_BX571965	3407017	3408243	glcF	+	0.339315	1.41346	3407827	3408243
gi_52208053_emb_BX571965	501740	503380	BPSL0465	+	0.0884146	1.4069	501740	503380
gi_52208053_emb_BX571965	2759055	2760506	BPSL2293	-	0.0544452	1.40506	2759055	2759134
gi_52208053_emb_BX571965	108383	108727	BPSL0097	+	0.261628	1.4	108592	108682
gi_52208053_emb_BX571965	2285354	2288281	infB	-	0.0758456	1.3964	2286201	2288281

gi_52208053_emb_BX571965	1032616	1033968	BPSL0890	-	0.0525148	1.39437	1033278	1033563
gi_52208053_emb_BX571965	944167	947367	bpeB	+	0.305	1.38832	944668	947367
gi_52208053_emb_BX571965	3798254	3799600	secY	-	0.43685	1.36224	3798637	3799225
gi_52208053_emb_BX571965	210930	212273	hslU	-	0.210722	1.36042	211847	212130
gi_52208053_emb_BX571965	1319300	1320697	BPSL1135	+	0.204724	1.36014	1319675	1319961
gi_52208053_emb_BX571965	3989646	3990764	BPSL3363	+	0.500894	1.35893	3989646	3990229
gi_52208053_emb_BX571965	1200419	1201198	hisP	-	0.0179718	1.35714	1201184	1201198
gi_52208053_emb_BX571965	2221116	2221775	BPSL1868	+	0.532625	1.35043	2221286	2221637
gi_52208053_emb_BX571965	33781	34656	BPSL0034	+	0.123429	1.32407	33945	34073
gi_52208053_emb_BX571965	414152	415936	argS	-	0.257287	1.32026	414277	414736
gi_52208053_emb_BX571965	3877520	3878950	BPSL3262	-	0.146853	1.31905	3877727	3877937
gi_52208053_emb_BX571965	1389893	1391170	BPSL1205	+	0.0360219	1.30435	1389893	1389939
gi_52208053_emb_BX571965	779381	780688	BPSL0684	-	0.3443	1.28444	780160	780610
gi_52208053_emb_BX571965	3724956	3725513	BPSL3119	-	0.254937	1.28169	3725204	3725346
gi_52208053_emb_BX571965	932724	933641	BPSL0804	-	0.484188	1.27703	933077	933521
gi_52208053_emb_BX571965	1603053	1603313	BPSL1372	-	0.288462	1.26667	1603238	1603313
gi_52208053_emb_BX571965	3030977	3032998	aroA%2FtyrA	-	0.158337	1.24375	3031275	3032140
gi_52208053_emb_BX571965	1433904	1436785	BPSLr02	+	0.635543	1.2414	1434272	1436539
gi_52208053_emb_BX571965	3845104	3845619	BPSL3238	-	0.543689	1.23214	3845339	3845619
gi_52208053_emb_BX571965	2789648	2791201	narH	+	0.255634	1.22922	2789916	2791138
gi_52208053_emb_BX571965	1010519	1010854	BPSL0870	+	0.489552	1.21951	1010519	1010683
gi_52208053_emb_BX571965	2878543	2879337	BPSL2383	-	0.331234	1.19772	2879074	2879337
gi_52208053_emb_BX571965	1083766	1084728	BPSL0932	-	0.345114	1.18976	1084387	1084719
gi_52208053_emb_BX571965	351992	352942	BPSL0329	+	0.316842	1.1794	351992	352293
gi_52208053_emb_BX571965	2801316	2801804	BPSL2319	+	0.713115	1.16954	2801316	2801664
gi_52208053_emb_BX571965	23466	25028	BPSL0022	+	0.492958	1.16494	23976	24785
gi_52208053_emb_BX571965	4039194	4039634	atpF	-	0.415909	1.16393	4039414	4039597
gi_52208053_emb_BX571965	3495261	3496718	BPSL2927	+	0.110501	1.16149	3495369	3495530
gi_52208053_emb_BX571965	2707244	2707909	BPSL2244	+	0.338346	1.15111	2707684	2707909
gi_52208053_emb_BX571965	1860683	1862650	nosZ	-	0.0625318	1.14634	1862527	1862650
gi_52208053_emb_BX571965	1161	2375	BPSL0002	-	0.263591	1.14375	1602	1922
gi_52208053_emb_BX571965	1800114	1801304	BPSL1551	+	0.289076	1.09012	1800395	1800816
gi_52208053_emb_BX571965	1281716	1287241	BPSL1109	-	0.0767421	1.08019	1282825	1285743
gi_52208053_emb_BX571965	2664853	2665980	BPSL2220	-	0.361136	1.05651	2665231	2665763
gi_52208053_emb_BX571965	3674009	3675271	BPSL3080	-	0.31775	1.02743	3674862	3675263
gi_52208053_emb_BX571965	3964455	3966017	BPSL3342	-	0.103713	1.01852	3965855	3966017
gi_52208053_emb_BX571965	1655372	1655686	BPSL1419	-	0.394904	1.00806	1655372	1655496
gi_52208053_emb_BX571965	36425	37222	BPSL0037	+	0.122961	1	36898	36996
gi_52208053_emb_BX571965	40566	41693	BPSL0041	+	0.377107	1	40923	41348
gi_52208053_emb_BX571965	57563	58372	BPSL0053	-	0.306551	1	58041	58289
gi_52208053_emb_BX571965	88374	90050	BPSL0078	+	0.139021	1	89099	89332
gi_52208053_emb_BX571965	101248	102249	BPSL0089	-	0.188811	1	101277	101466
gi_52208053_emb_BX571965	105283	106440	BPSL0093	+	0.375108	1	105294	105728
gi_52208053_emb_BX571965	109682	110098	BPSL0099	-	0.0552885	1	109682	109705
gi_52208053_emb_BX571965	111591	112532	BPSL0101	+	0.121148	1	112142	112256
gi_52208053_emb_BX571965	125800	126804	BPSL0113A	-	0.391434	1	126061	126516
gi_52208053_emb_BX571965	131843	134452	BPSL0118	-	0.0605596	1	132173	132331
gi_52208053_emb_BX571965	142226	144634	BPSL0127	+	0.0602159	1	143150	143295
gi_52208053_emb_BX571965	147388	150180	BPSL0130	-	0.00716332	1	148574	148594
gi_52208053_emb_BX571965	151180	151419	BPSL0133	-	0.748954	1	151180	151359
gi_52208053_emb_BX571965	151423	151632	BPSL0134	-	0.30622	1	151568	151632
gi_52208053_emb_BX571965	151661	151858	BPSL0135	-	0.177665	1	151661	151696
gi_52208053_emb_BX571965	173641	174651	BPSL0170	-	0.0316832	1	174097	174129
gi_52208053_emb_BX571965	233741	235384	BPSL0224	+	0.0663421	1	234870	234979
gi_52208053_emb_BX571965	273457	275412	BPSL0262	+	0.124297	1	274584	274827
gi_52208053_emb_BX571965	290455	291213	BPSL0279	+	0.292876	1	290879	291101
gi_52208053_emb_BX571965	305245	306513	BPSL0293	-	0.0449527	1	306369	306426
gi_52208053_emb_BX571965	316171	316806	BPSL0299	+	0.362205	1	316319	316549

gi_52208053_emb_BX571965	339593	340132	BPSL0319	-	0.198516	1	339593	339700
gi_52208053_emb_BX571965	362767	363495	BPSL0341	+	0.225275	1	362913	363077
gi_52208053_emb_BX571965	365609	368338	BPSL0345	-	0.1048	1	366493	368304
gi_52208053_emb_BX571965	389216	390619	BPSL0361	+	0.27655	1	390166	390554
gi_52208053_emb_BX571965	397561	398844	BPSL0368	-	0.13562	1	397561	397735
gi_52208053_emb_BX571965	413225	414073	BPSL0382	-	0.183962	1	413866	414022
gi_52208053_emb_BX571965	430475	431254	BPSL0397	-	0.0487805	1	431138	431176
gi_52208053_emb_BX571965	448619	448993	BPSL0415	-	0.352941	1	448723	448855
gi_52208053_emb_BX571965	489595	490560	BPSL0451	+	0.150259	1	489986	490131
gi_52208053_emb_BX571965	516794	518146	BPSL0476	-	0.0769231	1	517307	517411
gi_52208053_emb_BX571965	581037	581669	BPSL0528	-	0.327532	1	581279	581486
gi_52208053_emb_BX571965	589316	590299	BPSL0538	-	0.0528993	1	589733	589785
gi_52208053_emb_BX571965	617396	621349	BPSL0565	-	0.0574247	1	618767	618994
gi_52208053_emb_BX571965	631502	633238	BPSL0574	+	0.0408986	1	632715	632786
gi_52208053_emb_BX571965	673053	675353	BPSL0600	+	0.0256522	1	673053	673112
gi_52208053_emb_BX571965	698536	699402	BPSL0617	+	0.136259	1	699284	699402
gi_52208053_emb_BX571965	699399	700817	BPSL0618	+	0.0197461	1	699399	699427
gi_52208053_emb_BX571965	707731	709326	BPSL0625	+	0.0219436	1	708288	708323
gi_52208053_emb_BX571965	734064	735851	BPSL0648	+	0.0509233	1	735354	735445
gi_52208053_emb_BX571965	740796	741620	BPSL0652	-	0.00364078	1	741617	741620
gi_52208053_emb_BX571965	762676	763563	BPSL0670	-	0.120631	1	762814	762921
gi_52208053_emb_BX571965	816038	817771	BPSL0713	-	0.130987	1	817155	817382
gi_52208053_emb_BX571965	819482	820171	BPSL0716	+	0.380261	1	819892	820154
gi_52208053_emb_BX571965	830934	832055	BPSL0723	-	0.0160571	1	831095	831113
gi_52208053_emb_BX571965	845513	847321	BPSL0732	-	0.220686	1	845971	846370
gi_52208053_emb_BX571965	851785	852705	BPSL0736	-	0.0836957	1	851785	851862
gi_52208053_emb_BX571965	863547	864605	BPSL0748	+	0.340265	1	863609	863969
gi_52208053_emb_BX571965	868473	869510	BPSL0752	+	0.22758	1	868823	869059
gi_52208053_emb_BX571965	874119	874562	BPSL0757	+	0.255079	1	874119	874232
gi_52208053_emb_BX571965	877250	877804	BPSL0762	+	0.0703971	1	877306	877345
gi_52208053_emb_BX571965	878619	881801	BPSL0763	+	0.0370836	1	881439	881557
gi_52208053_emb_BX571965	896323	896559	BPSL0771	-	0.105932	1	896323	896348
gi_52208053_emb_BX571965	896537	898423	BPSL0772	-	0.0164369	1	896722	896753
gi_52208053_emb_BX571965	902391	903134	BPSL0775	-	0.131898	1	903036	903134
gi_52208053_emb_BX571965	931480	932619	BPSL0803	-	0.181738	1	932307	932514
gi_52208053_emb_BX571965	939851	940273	BPSL0809	+	0.218009	1	939919	940011
gi_52208053_emb_BX571965	959899	960675	BPSL0826	+	0.0811856	1	960612	960675
gi_52208053_emb_BX571965	961624	963120	BPSL0828	+	0.118316	1	962636	963120
gi_52208053_emb_BX571965	963171	964499	BPSL0829	+	0.0933735	1	963171	963295
gi_52208053_emb_BX571965	982322	983254	BPSL0844	+	0.256438	1	983015	983254
gi_52208053_emb_BX571965	1035599	1036444	BPSL0892	+	0.151479	1	1035769	1035897
gi_52208053_emb_BX571965	1073343	1074293	BPSL0920	+	0.183158	1	1073465	1073639
gi_52208053_emb_BX571965	1085948	1086844	BPSL0934	+	0.0256696	1	1085989	1086012
gi_52208053_emb_BX571965	1093213	1097322	BPSL0941	+	0.0316379	1	1097156	1097286
gi_52208053_emb_BX571965	1121914	1123011	BPSL0964	-	0.0309936	1	1122166	1122200
gi_52208053_emb_BX571965	1133678	1135735	BPSL0976	+	0.0330579	1	1134921	1134989
gi_52208053_emb_BX571965	1166038	1168317	BPSL1003	+	0.0776656	1	1166052	1166229
gi_52208053_emb_BX571965	1177309	1178124	BPSL1011	-	0.0957055	1	1178046	1178124
gi_52208053_emb_BX571965	1269354	1270196	BPSL1098	-	0.109264	1	1270104	1270196
gi_52208053_emb_BX571965	1287413	1287934	BPSL1110	-	0.00191939	1	1287933	1287934
gi_52208053_emb_BX571965	1310507	1311775	BPSL1127	-	0.035489	1	1311488	1311533
gi_52208053_emb_BX571965	1386330	1387877	BPSL1202	-	0.147382	1	1387256	1387484
gi_52208053_emb_BX571965	1429940	1431157	BPSL1246	-	0.0714873	1	1430858	1430945
gi_52208053_emb_BX571965	1451594	1452886	BPSL1257	+	0.522446	1	1451711	1452437
gi_52208053_emb_BX571965	1480968	1482023	BPSL1278	-	0.418009	1	1481303	1481744
gi_52208053_emb_BX571965	1487013	1490357	BPSL1282	+	0.0191388	1	1488642	1488706
gi_52208053_emb_BX571965	1490354	1494166	BPSL1283	+	0.00629591	1	1492810	1492834
gi_52208053_emb_BX571965	1507098	1507889	BPSL1294	+	0.0366625	1	1507860	1507889

gi_52208053_emb_BX571965	1512862	1513689	BPSL1299	-	0.0918984	1	1513333	1513409
gi_52208053_emb_BX571965	1517203	1518027	BPSL1302	-	0.174757	1	1517562	1517706
gi_52208053_emb_BX571965	1518129	1519190	BPSL1303	-	0.0471254	1	1518743	1518793
gi_52208053_emb_BX571965	1581618	1582172	BPSL1354	-	0.0415162	1	1581917	1581940
gi_52208053_emb_BX571965	1603310	1603720	BPSL1373	-	0.943902	1	1603310	1603697
gi_52208053_emb_BX571965	1610849	1611562	BPSL1381	-	0.215989	1	1611408	1611562
gi_52208053_emb_BX571965	1656794	1658371	BPSL1422	-	0.0469245	1	1656879	1656953
gi_52208053_emb_BX571965	1660379	1662463	BPSL1424	+	0.0230326	1	1660540	1660588
gi_52208053_emb_BX571965	1671793	1672812	BPSL1435	+	0.0235525	1	1671953	1671977
gi_52208053_emb_BX571965	1706795	1707802	BPSL1471	-	0.163853	1	1707502	1707667
gi_52208053_emb_BX571965	1707809	1708960	BPSL1472	-	0.329279	1	1708560	1708939
gi_52208053_emb_BX571965	1727666	1729504	BPSL1490	-	0.0136017	1	1728832	1728857
gi_52208053_emb_BX571965	1773584	1774408	BPSL1531	-	0.144417	1	1774143	1774262
gi_52208053_emb_BX571965	1789902	1790447	BPSL1544	+	0.188991	1	1790143	1790246
gi_52208053_emb_BX571965	1819725	1822895	BPSL1567	-	0.0526814	1	1820212	1820379
gi_52208053_emb_BX571965	1845797	1846417	BPSL1592	-	0.146774	1	1846326	1846417
gi_52208053_emb_BX571965	1846457	1846575	BPSL1592A	-	0.516949	1	1846457	1846518
gi_52208053_emb_BX571965	1857508	1858344	BPSL1604	-	0.113636	1	1857928	1858023
gi_52208053_emb_BX571965	1868738	1870450	BPSL1613	+	0.0905374	1	1868738	1868893
gi_52208053_emb_BX571965	1871907	1872869	BPSL1615	-	0.0135135	1	1872856	1872869
gi_52208053_emb_BX571965	1874296	1875738	BPSL1617	-	0.0416089	1	1875186	1875246
gi_52208053_emb_BX571965	1889771	1893145	BPSL1631	+	0.0509781	1	1892021	1892193
gi_52208053_emb_BX571965	1903962	1904729	BPSL1639	-	0.0625815	1	1904456	1904504
gi_52208053_emb_BX571965	1944518	1946188	BPSL1667	+	0.15509	1	1945853	1946173
gi_52208053_emb_BX571965	1950345	1950824	BPSL1671	+	0.427975	1	1950345	1950550
gi_52208053_emb_BX571965	1955029	1956663	BPSL1676	-	0.0893513	1	1956294	1956440
gi_52208053_emb_BX571965	1996808	1998529	BPSL1711	-	0.138873	1	1997735	1997974
gi_52208053_emb_BX571965	2023772	2025004	BPSL1718	-	0.012987	1	2024988	2025004
gi_52208053_emb_BX571965	2027369	2028583	BPSL1721	-	0.0140033	1	2028116	2028133
gi_52208053_emb_BX571965	2048228	2049166	BPSL1737	+	0.228145	1	2048415	2048629
gi_52208053_emb_BX571965	2121906	2122796	BPSL1784	-	0.111236	1	2122250	2122349
gi_52208053_emb_BX571965	2128282	2129373	BPSL1790	-	0.0531622	1	2129210	2129268
gi_52208053_emb_BX571965	2132189	2133133	BPSL1793	-	0.0286017	1	2132929	2132956
gi_52208053_emb_BX571965	2133238	2134254	BPSL1794	-	0.0177165	1	2133238	2133256
gi_52208053_emb_BX571965	2170316	2171155	BPSL1823	-	0.0417163	1	2170933	2170968
gi_52208053_emb_BX571965	2180671	2182575	BPSL1829	-	0.075105	1	2180671	2180814
gi_52208053_emb_BX571965	2202667	2203113	BPSL1849	-	0.392377	1	2202843	2203113
gi_52208053_emb_BX571965	2203286	2203762	BPSL1850	+	0.136555	1	2203428	2203493
gi_52208053_emb_BX571965	2214022	2215164	BPSL1860	-	0.11296	1	2214321	2214450
gi_52208053_emb_BX571965	2236553	2238265	BPSL1878	-	0.0712617	1	2237418	2237540
gi_52208053_emb_BX571965	2242630	2244402	BPSL1883	+	0.0124153	1	2243542	2243564
gi_52208053_emb_BX571965	2257078	2258403	BPSL1895	-	0.173585	1	2257489	2258109
gi_52208053_emb_BX571965	2294125	2295027	BPSL1923	-	0.371397	1	2294623	2294958
gi_52208053_emb_BX571965	2297950	2298228	BPSL1929	+	0.672662	1	2297950	2298137
gi_52208053_emb_BX571965	2298684	2298974	BPSL1931	-	0.158621	1	2298928	2298974
gi_52208053_emb_BX571965	2319386	2319739	BPSL1947	-	0.0679887	1	2319629	2319653
gi_52208053_emb_BX571965	2323136	2323693	BPSL1951	+	0.40395	1	2323136	2323361
gi_52208053_emb_BX571965	2323708	2324808	BPSL1952	+	0.113636	1	2323708	2323833
gi_52208053_emb_BX571965	2340641	2341945	BPSL1966	-	0.312117	1	2341504	2341911
gi_52208053_emb_BX571965	2343149	2344570	BPSL1969	+	0.0309641	1	2343515	2343559
gi_52208053_emb_BX571965	2366590	2367936	BPSL1984	-	0.137444	1	2367154	2367339
gi_52208053_emb_BX571965	2388211	2388546	BPSL2003	+	0.146269	1	2388443	2388492
gi_52208053_emb_BX571965	2398792	2400012	BPSL2010	+	0.345902	1	2399103	2400006
gi_52208053_emb_BX571965	2400341	2400547	BPSL2011	-	0.0339806	1	2400540	2400547
gi_52208053_emb_BX571965	2404072	2406120	BPSL2015	-	0.0537109	1	2405850	2405960
gi_52208053_emb_BX571965	2417418	2418038	BPSL2024	-	0.269355	1	2417418	2417585
gi_52208053_emb_BX571965	2420543	2421508	BPSL2026	-	0.290155	1	2420615	2421508
gi_52208053_emb_BX571965	2421524	2423872	BPSL2027	-	0.016184	1	2421524	2421562

gi_52208053_emb_BX571965	2423980	2424819	BPSL2028	-	0.27056	1	2424536	2424763
gi_52208053_emb_BX571965	2438558	2441398	BPSL2041	-	0.00809859	1	2439356	2439379
gi_52208053_emb_BX571965	2446979	2449387	BPSL2047	-	0.129983	1	2447600	2447913
gi_52208053_emb_BX571965	2454823	2455089	BPSL2051	+	1	1	2454823	2455089
gi_52208053_emb_BX571965	2455086	2456528	BPSL2052	+	0.0270458	1	2455086	2455125
gi_52208053_emb_BX571965	2510636	2511892	BPSL2091	-	0.013535	1	2510946	2510963
gi_52208053_emb_BX571965	2562571	2563539	BPSL2134	+	0.183884	1	2562617	2562795
gi_52208053_emb_BX571965	2634115	2634978	BPSL2195	+	0.0926999	1	2634802	2634882
gi_52208053_emb_BX571965	2645029	2646981	BPSL2203	-	0.0384221	1	2645220	2645295
gi_52208053_emb_BX571965	2648146	2648499	BPSL2205	-	0.0934844	1	2648466	2648499
gi_52208053_emb_BX571965	2649224	2651545	BPSL2207	-	0.093925	1	2651062	2651280
gi_52208053_emb_BX571965	2668097	2668936	BPSL2223	-	0.153754	1	2668597	2668726
gi_52208053_emb_BX571965	2671740	2672618	BPSL2227	-	0.0512528	1	2672573	2672618
gi_52208053_emb_BX571965	2672623	2673420	BPSL2228	-	0.0840652	1	2672623	2672690
gi_52208053_emb_BX571965	2673417	2682440	BPSL2229	-	0.0115261	1	2674332	2674436
gi_52208053_emb_BX571965	2690294	2691574	BPSL2234	+	0.195312	1	2690805	2691055
gi_52208053_emb_BX571965	2719091	2719636	BPSL2254	-	0.8	1	2719189	2719625
gi_52208053_emb_BX571965	2719729	2720892	BPSL2255	+	0.143594	1	2719729	2720892
gi_52208053_emb_BX571965	2725214	2726416	BPSL2260	-	0.014975	1	2725269	2725287
gi_52208053_emb_BX571965	2731604	2732554	BPSL2267	+	0.0157895	1	2732539	2732554
gi_52208053_emb_BX571965	2732638	2732985	BPSL2268	+	0.00288184	1	2732638	2732639
gi_52208053_emb_BX571965	2745783	2747477	BPSL2279	+	0.152302	1	2747045	2747303
gi_52208053_emb_BX571965	2758684	2758944	BPSL2292	-	0.507692	1	2758812	2758944
gi_52208053_emb_BX571965	2762495	2763958	BPSL2296	-	0.159945	1	2763172	2763406
gi_52208053_emb_BX571965	2776045	2776683	BPSL2303	+	0.0548589	1	2776504	2776539
gi_52208053_emb_BX571965	2802057	2802875	BPSL2320	-	0.179707	1	2802510	2802657
gi_52208053_emb_BX571965	2813906	2815288	BPSL2328	-	0.0759768	1	2815106	2815211
gi_52208053_emb_BX571965	2837796	2838521	BPSL2347	-	0.475862	1	2837821	2838166
gi_52208053_emb_BX571965	2877018	2878250	BPSL2382	+	0.201299	1	2877565	2877813
gi_52208053_emb_BX571965	2964859	2965848	BPSL2459	-	0.0586451	1	2965144	2965202
gi_52208053_emb_BX571965	3041211	3041936	BPSL2524	+	0.097931	1	3041672	3041743
gi_52208053_emb_BX571965	3083026	3083502	BPSL2554	-	0.140756	1	3083435	3083502
gi_52208053_emb_BX571965	3129946	3130803	BPSL2609	-	0.0105018	1	3130794	3130803
gi_52208053_emb_BX571965	3173859	3175166	BPSL2651	+	0.0596787	1	3174664	3174742
gi_52208053_emb_BX571965	3187094	3187978	BPSL2664	-	0.222851	1	3187619	3187816
gi_52208053_emb_BX571965	3192943	3194100	BPSL2669	+	0.0302506	1	3193924	3193959
gi_52208053_emb_BX571965	3194115	3195137	BPSL2670	+	0.192759	1	3194837	3195137
gi_52208053_emb_BX571965	3195165	3196271	BPSL2671	+	0.299277	1	3195165	3195496
gi_52208053_emb_BX571965	3229950	3230957	BPSL2701	+	0.0397219	1	3230222	3230262
gi_52208053_emb_BX571965	3243615	3245057	BPSL2713	+	0.090846	1	3243897	3244455
gi_52208053_emb_BX571965	3273006	3273986	BPSL2733	+	0.0367347	1	3273374	3273410
gi_52208053_emb_BX571965	3275577	3276236	BPSL2735	+	0.0986343	1	3276027	3276092
gi_52208053_emb_BX571965	3364033	3364776	BPSL2813	-	0.0309556	1	3364647	3364670
gi_52208053_emb_BX571965	3529801	3530232	BPSL2958	-	0.206497	1	3530117	3530206
gi_52208053_emb_BX571965	3534207	3534680	BPSL2961	+	0.473573	1	3534207	3534431
gi_52208053_emb_BX571965	3541115	3542110	BPSL2968	-	0.0683417	1	3542042	3542110
gi_52208053_emb_BX571965	3546427	3548061	BPSL2974	-	0.0954712	1	3547905	3548061
gi_52208053_emb_BX571965	3554561	3555217	BPSL2980	+	0.306402	1	3554675	3554876
gi_52208053_emb_BX571965	3559364	3560773	BPSL2986	+	0.0141945	1	3559515	3559535
gi_52208053_emb_BX571965	3577395	3578858	BPSL3001	-	0.256323	1	3578102	3578477
gi_52208053_emb_BX571965	3616964	3617590	BPSL3035	-	0.0527157	1	3617557	3617590
gi_52208053_emb_BX571965	3671584	3673185	BPSL3078	-	0.0349781	1	3671921	3671977
gi_52208053_emb_BX571965	3685343	3687508	BPSL3089	+	0.00877598	1	3685343	3685362
gi_52208053_emb_BX571965	3694948	3695934	BPSL3095	-	0.0811359	1	3695501	3695934
gi_52208053_emb_BX571965	3697190	3701083	BPSL3097	+	0.0662728	1	3699389	3699647
gi_52208053_emb_BX571965	3718434	3719234	BPSL3114	+	0.06875	1	3718484	3718539
gi_52208053_emb_BX571965	3753763	3755529	BPSL3155	+	0.0198188	1	3753763	3753798
gi_52208053_emb_BX571965	3774618	3775946	BPSL3170	-	0.0850904	1	3774698	3774811

gi_52208053_emb_BX571965	3847621	3851202	BPSL3241	+	0.0597598	1	3848022	3848236
gi_52208053_emb_BX571965	3871231	3872637	BPSL3256	+	0.0369844	1	3872585	3872637
gi_52208053_emb_BX571965	3884037	3884951	BPSL3268	+	0.135667	1	3884742	3884866
gi_52208053_emb_BX571965	3891660	3892295	BPSL3276	-	0.411024	1	3892034	3892295
gi_52208053_emb_BX571965	3899419	3900561	BPSL3284	-	0.279335	1	3900070	3900389
gi_52208053_emb_BX571965	4032011	4033741	BPSL3394	-	0.269364	1	4032542	4033008
gi_52208053_emb_BX571965	127411	127486	BPSLt01	-	0.533333	1	127446	127486
gi_52208053_emb_BX571965	2636889	2636964	BPSLt25	-	0.4	1	2636900	2636930
gi_52208053_emb_BX571965	3830013	3830098	BPSLt48	-	0.388235	1	3830055	3830088
gi_52208053_emb_BX571965	3179763	3180761	UreD	+	0.258517	1	3180329	3180587
gi_52208053_emb_BX571965	2147818	2150949	amrB	-	0.0795273	1	2147973	2148222
gi_52208053_emb_BX571965	4037064	4038605	atpA	-	0.211551	1	4037703	4038029
gi_52208053_emb_BX571965	395651	396997	bioA	-	0.156018	1	396163	396373
gi_52208053_emb_BX571965	393751	394473	bioD	-	0.139889	1	394237	394338
gi_52208053_emb_BX571965	941844	942479	bpeR	-	0.286614	1	942237	942419
gi_52208053_emb_BX571965	230375	231793	calB	-	0.0148096	1	230969	230990
gi_52208053_emb_BX571965	2188911	2189837	cbl	-	0.087473	1	2188993	2189074
gi_52208053_emb_BX571965	1631727	1632380	clpP	+	0.271057	1	1632052	1632229
gi_52208053_emb_BX571965	2068491	2069216	cobM	-	0.205517	1	2068497	2069174
gi_52208053_emb_BX571965	2084041	2087886	cobN	-	0.0470741	1	2084222	2084403
gi_52208053_emb_BX571965	492944	494551	ctaD	+	0.100187	1	493800	493961
gi_52208053_emb_BX571965	2723653	2724555	dapA	-	0.190687	1	2723911	2724083
gi_52208053_emb_BX571965	1295759	1299283	dnaE	+	0.034336	1	1296327	1297895
gi_52208053_emb_BX571965	509901	513119	dnaE2	+	0.00994406	1	510371	510403
gi_52208053_emb_BX571965	3013528	3014277	etfB	-	0.0387183	1	3014248	3014277
gi_52208053_emb_BX571965	4000764	4002161	eutB	-	0.107373	1	4001640	4001790
gi_52208053_emb_BX571965	3074711	3075727	fbp	+	0.139764	1	3075485	3075627
gi_52208053_emb_BX571965	3047105	3050059	fdsA	+	0.0179418	1	3049183	3049236
gi_52208053_emb_BX571965	283631	284482	flgD	+	0.0258519	1	283698	283720
gi_52208053_emb_BX571965	291419	293422	flgK	+	0.158263	1	293017	293334
gi_52208053_emb_BX571965	3911356	3913458	flhA	-	0.0466223	1	3912912	3913010
gi_52208053_emb_BX571965	239562	240557	fliG	-	0.182915	1	240001	240183
gi_52208053_emb_BX571965	237324	238895	fliI	-	0.359007	1	237611	238175
gi_52208053_emb_BX571965	2652050	2652823	fpr	-	0.644243	1	2652057	2652653
gi_52208053_emb_BX571965	3613015	3614859	ftsI	-	0.235358	1	3614149	3614583
gi_52208053_emb_BX571965	2489273	2491489	glgB	+	0.00812274	1	2490034	2490052
gi_52208053_emb_BX571965	1586111	1587469	glmM	+	0.122975	1	1586815	1586982
gi_52208053_emb_BX571965	333510	334871	glmU	-	0.0382072	1	333820	333872
gi_52208053_emb_BX571965	2798211	2799305	glnL	-	0.0566728	1	2798399	2798461
gi_52208053_emb_BX571965	3491082	3491984	gltI	-	0.564302	1	3491350	3491859
gi_52208053_emb_BX571965	2637135	2638544	gltX	-	0.100071	1	2637634	2637775
gi_52208053_emb_BX571965	759664	760671	glyQ	-	0.353525	1	760126	760482
gi_52208053_emb_BX571965	3342168	3342761	gmhA	-	0.06914	1	3342513	3342554
gi_52208053_emb_BX571965	483930	484679	gpmA	-	0.156208	1	483930	484568
gi_52208053_emb_BX571965	3739853	3741190	hisD	-	0.0897532	1	3740596	3740716
gi_52208053_emb_BX571965	1202831	1203607	hisJ	-	0.148196	1	1203292	1203407
gi_52208053_emb_BX571965	1761911	1763059	hisZ	+	0.043554	1	1762864	1762914
gi_52208053_emb_BX571965	3280722	3282074	hmgA	-	0.0954142	1	3280799	3280928
gi_52208053_emb_BX571965	2754661	2755188	hscB	-	0.12334	1	2755096	2755161
gi_52208053_emb_BX571965	1258240	1260138	htpG	+	0.0200211	1	1259313	1259351
gi_52208053_emb_BX571965	2830050	2831738	hutU	-	0.0242891	1	2831180	2831221
gi_52208053_emb_BX571965	3993626	3995329	ilvG	+	0.0669407	1	3994993	3995107
gi_52208053_emb_BX571965	2314163	2314699	infC	-	0.0652985	1	2314585	2314620
gi_52208053_emb_BX571965	1751569	1752819	ispG	+	0.1984	1	1752148	1752396
gi_52208053_emb_BX571965	1384648	1386195	leuA	+	0.0174531	1	1385928	1385955
gi_52208053_emb_BX571965	1634008	1636425	lon	+	0.0678527	1	1635395	1635559
gi_52208053_emb_BX571965	2749035	2750561	lysS	+	0.0334207	1	2749702	2749753
gi_52208053_emb_BX571965	1339113	1339742	maf	-	0.265501	1	1339353	1339520

gi_52208053_emb_BX571965	1159815	1161992	metG	-	0.0491502	1	1161410	1161517
gi_52208053_emb_BX571965	419469	420548	metH2	-	0.0741427	1	419469	419549
gi_52208053_emb_BX571965	3016015	3017049	metN	-	0.0193424	1	3016488	3016508
gi_52208053_emb_BX571965	767263	768636	miaB	-	0.13547	1	768350	768536
gi_52208053_emb_BX571965	2959179	2960261	moaA	+	0.227357	1	2959466	2959813
gi_52208053_emb_BX571965	2209475	2209690	mopII	-	1	1	2209475	2209690
gi_52208053_emb_BX571965	3552955	3554439	mpl	-	0.0606469	1	3553483	3553573
gi_52208053_emb_BX571965	1194534	1196264	nadE	+	0.104046	1	1194836	1195016
gi_52208053_emb_BX571965	3564144	3565196	nrdB	-	0.0551331	1	3564267	3564325
gi_52208053_emb_BX571965	2994786	2995391	orn	-	0.0396694	1	2995281	2995305
gi_52208053_emb_BX571965	3630348	3632054	paaZ	+	0.140094	1	3631634	3631873
gi_52208053_emb_BX571965	1123132	1124643	pepA	+	0.169424	1	1124159	1124415
gi_52208053_emb_BX571965	2312221	2313243	pheS	-	0.092955	1	2312840	2312935
gi_52208053_emb_BX571965	2309701	2312133	pheT	-	0.0226151	1	2311675	2311730
gi_52208053_emb_BX571965	3415455	3416225	phnK	-	0.0363636	1	3416069	3416097
gi_52208053_emb_BX571965	3586238	3587455	pilC	+	0.10189	1	3586480	3587455
gi_52208053_emb_BX571965	2707966	2708541	ppiA	+	0.488696	1	2707966	2708247
gi_52208053_emb_BX571965	1590023	1590916	pstA	+	0.335946	1	1590529	1590829
gi_52208053_emb_BX571965	1649862	1653932	purL	+	0.0218673	1	1651298	1651387
gi_52208053_emb_BX571965	3432038	3433120	queA	+	0.252311	1	3432248	3432521
gi_52208053_emb_BX571965	3148701	3149837	ribB	+	0.142606	1	3149217	3149379
gi_52208053_emb_BX571965	2954013	2955020	rluC	-	0.204568	1	2954752	2954958
gi_52208053_emb_BX571965	2934365	2935768	rnc	-	0.451889	1	2934673	2935620
gi_52208053_emb_BX571965	3795181	3796158	rpoA	-	0.230297	1	3795193	3795418
gi_52208053_emb_BX571965	2326613	2327317	scoA	-	0.0170455	1	2326613	2326625
gi_52208053_emb_BX571965	2325970	2326611	scoB	-	0.304212	1	2326416	2326611
gi_52208053_emb_BX571965	960680	961636	scrK	+	0.145397	1	960680	960819
gi_52208053_emb_BX571965	1442504	1443778	serA	+	0.022763	1	1442962	1442991
gi_52208053_emb_BX571965	318749	321172	silP	-	0.0239373	1	320926	320984
gi_52208053_emb_BX571965	906374	907540	sucC	+	0.138937	1	907162	907324
gi_52208053_emb_BX571965	907685	908566	sucD	+	0.170261	1	908101	908251
gi_52208053_emb_BX571965	3828544	3829734	tuf	-	0.576471	1	3829224	3829578
gi_52208053_emb_BX571965	725701	727278	ubiB	+	0.0412175	1	726217	726282
gi_52208053_emb_BX571965	3644787	3645524	ung	+	0.0393487	1	3644996	3645025
gi_52208053_emb_BX571965	597179	600046	uvrA	-	0.0272061	1	598748	598826
gi_52208053_emb_BX571965	2924091	2926328	uvrC	-	0.0102816	1	2925285	2925308
gi_52208053_emb_BX571965	3207116	3208354	wbiA	-	0.0961228	1	3207988	3208107
gi_52208053_emb_BX571965	3203353	3205077	wbiD	-	0.0203016	1	3204166	3204201
gi_52208053_emb_BX571965	3357826	3359841	wcbA	+	0.0173697	1	3359601	3359636
gi_52208053_emb_BX571965	3353701	3354849	wcbD	-	0.101045	1	3353755	3353871
gi_52208053_emb_BX571965	3342743	3343783	wcbL	-	0.414423	1	3342913	3343344
gi_52208053_emb_BX571965	3329477	3337117	wcbR	-	0.0454188	1	3334070	3335025
gi_52208053_emb_BX571965	3209750	3210583	wzm	-	0.128451	1	3210004	3210111
gi_52208053_emb_BX571965	3262952	3265315	xdhB	-	0.00888701	1	3263766	3263787
gi_52208053_emb_BX571965	1018910	1020292	xseA	+	0.0296671	1	1020146	1020187

Table S6 List of genes belonging to chromosome II with a mean_depth > 1

chr	start	end	locus_tag	strand	gene	coverage	mean_depth	peak_start	peak_end
gi_52211453_emb_BX571966	2736052	2737575	BPSS2025	-		0.0144452	20006.9	2737553	2737575
gi_52211453_emb_BX571966	2433214	2434440	BPSS1774	-		0.33279	6295.87	2434032	2434440
gi_52211453_emb_BX571966	499290	499841	BPSS0357	+		1	6146.87	499290	499841
gi_52211453_emb_BX571966	2176601	2177170	BPSS1601	-		0.367311	1890.96	2176733	2177170
gi_52211453_emb_BX571966	2660333	2661316	BPSS1970	+		0.905392	1066.3	2660362	2661316
gi_52211453_emb_BX571966	2177487	2178593	piiT	+		0.669078	529.072	2177487	2178227
gi_52211453_emb_BX571966	2859411	2860655	BPSS2111	+		0.391479	308.532	2859411	2859898
gi_52211453_emb_BX571966	1322012	1323271	BPSS1002	-		0.252581	205.305	1322953	1323271
gi_52211453_emb_BX571966	1585839	1587188	BPSS1178	-		0.212009	197.157	1586902	1587188
gi_52211453_emb_BX571966	2731210	2732691	BPSS2021	-		0.273464	133.672	2732286	2732691
gi_52211453_emb_BX571966	72252	72812	BPSS0064	-		0.0642857	122.944	72252	72288
gi_52211453_emb_BX571966	578412	579629	BPSS0418	+		0.133936	99.2331	578817	578980
gi_52211453_emb_BX571966	2732831	2733736	BPSS2022	+		0.267403	92.0579	2732831	2733073
gi_52211453_emb_BX571966	1293562	1295175	BPSS0976	+		0.201488	79.2492	1294850	1295175
gi_52211453_emb_BX571966	782752	783867	braC	+		0.13722	76.6667	782752	782905
gi_52211453_emb_BX571966	902357	904294	BPSS0666	-		0.0924109	67.7989	904115	904294
gi_52211453_emb_BX571966	2524957	2526144	BPSS1860	-		0.379949	61.0377	2525693	2526144
gi_52211453_emb_BX571966	1948688	1956592	BPSS1434	-		0.04542	54.5989	1948688	1949047
gi_52211453_emb_BX571966	1295220	1296533	BPSS0977	+		0.0243717	50.5625	1295220	1295252
gi_52211453_emb_BX571966	1003007	1004239	BPSS0746	-		0.613636	45.4246	1003109	1003865
gi_52211453_emb_BX571966	904497	905030	BPSS0667	+		0.557223	43.9495	904497	904794
gi_52211453_emb_BX571966	3143858	3146491	BPSS2330	+		0.0569692	43.4067	3145175	3145441
gi_52211453_emb_BX571966	2795170	2795802	BPSS2061	+		0.370253	34.8376	2795170	2795404
gi_52211453_emb_BX571966	1829021	1829368	BPSS1339	-		0.821326	31.9158	1829021	1829306
gi_52211453_emb_BX571966	537046	537543	BPSS0391A	-		0.203219	30.4158	537442	537543
gi_52211453_emb_BX571966	2853944	2854462	BPSS2107	-		0.0810811	28	2854420	2854462
gi_52211453_emb_BX571966	547717	548649	BPSS0405	+		0.683476	27.2794	547717	548354
gi_52211453_emb_BX571966	2855102	2855503	BPSS2108	+		0.321696	26.7907	2855102	2855231
gi_52211453_emb_BX571966	2822906	2824966	BPSS2086	-		0.23835	26.7862	2824475	2824966
gi_52211453_emb_BX571966	1556400	1557245	BPSS1165	-		0.64142	26.5129	1556478	1557020
gi_52211453_emb_BX571966	947399	948070	BPSS0705	+		0.299553	24.7512	947399	947600
gi_52211453_emb_BX571966	546190	547560	BPSS0404	+		0.194891	22.8577	547293	547560
gi_52211453_emb_BX571966	2808477	2809190	BPSS2073	-		0.388499	21.1588	2808913	2809190
gi_52211453_emb_BX571966	3166744	3167406	BPSS2349	+		0.380665	20.2937	3166744	3166996
gi_52211453_emb_BX571966	2793880	2794935	ansA	-		0.730806	20.0104	2794164	2794935
gi_52211453_emb_BX571966	1438063	1439118	BPSS1062	-		0.672038	19.9577	1438147	1438856
gi_52211453_emb_BX571966	836572	837459	BPSS0613	-		0.688839	19.5794	836815	837426
gi_52211453_emb_BX571966	496976	499066	uvrB	+		0.076555	19.3313	498449	499066
gi_52211453_emb_BX571966	51665	52855	chrA	-		0.451261	18.4711	52302	52855
gi_52211453_emb_BX571966	1811570	1812529	BPSS1323	-		0.55683	17.6667	1811995	1812529
gi_52211453_emb_BX571966	788473	789708	BPSS0580	+		0.245344	16.0165	788473	788776
gi_52211453_emb_BX571966	54765	55313	BPSS0055	+		0.702555	15.9558	54765	55150
gi_52211453_emb_BX571966	2066773	2067066	BPSS1513	+		0.34471	15.198	2066965	2067066
gi_52211453_emb_BX571966	186668	189283	BPSS0144	-		0.383174	15.0798	187108	189283
gi_52211453_emb_BX571966	878644	878913	BPSS0645	+		1	14.9145	878644	878913
gi_52211453_emb_BX571966	894966	895400	BPSS0659	+		0.35023	14.3158	894966	895118
gi_52211453_emb_BX571966	2067071	2067703	foIE	+		0.639241	14.099	2067071	2067475
gi_52211453_emb_BX571966	1967536	1968717	BPSS1444	-		0.171041	14.0099	1968465	1968667
gi_52211453_emb_BX571966	1323383	1323721	BPSS1003	-		0.627219	13.4764	1323383	1323595
gi_52211453_emb_BX571966	1113438	1115375	BPSS0827	+		0.105834	12.9951	1113438	1114073
gi_52211453_emb_BX571966	1828597	1829031	BPSS1338	-		0.490783	12.8967	1828818	1829031
gi_52211453_emb_BX571966	2359545	2360345	BPSS1721	-		0.335	12.791	2359545	2359813
gi_52211453_emb_BX571966	946182	947270	BPSS0704	-		0.582721	12.7871	946636	947270
gi_52211453_emb_BX571966	2358929	2359345	BPSS1720	-		0.115385	12	2359297	2359345
gi_52211453_emb_BX571966	2262606	2263775	BPSS1646	-		0.420017	11.6619	2263224	2263715
gi_52211453_emb_BX571966	1645592	1647145	BPSS1218	+		0.457824	11.2729	1645810	1646521
gi_52211453_emb_BX571966	1960277	1964869	BPSS1439	+		0.0703397	11.0124	1960277	1960822
gi_52211453_emb_BX571966	2306033	2307187	BPSS1679	+		0.577123	10.8258	2306033	2307187
gi_52211453_emb_BX571966	2714171	2715988	glmS3	-		0.207485	10.4164	2714780	2715940
gi_52211453_emb_BX571966	110182	110727	BPSS0091	+		0.383486	10.4115	110182	110391
gi_52211453_emb_BX571966	198951	199391	BPSS0152	+		0.229545	9.62376	198951	199052
gi_52211453_emb_BX571966	522475	522720	BPSS0381	+		0.8	9.30612	522475	522671

gi_52211453_emb_BX571966	888951	890615	BPSS0655	+	0.347957	9.19344	888951	890615
gi_52211453_emb_BX571966	2820342	2821583	BPSS2084	-	0.134569	9.19162	2821416	2821583
gi_52211453_emb_BX571966	1200501	1202816	BPSS0908	+	0.183585	9.05412	1200501	1200926
gi_52211453_emb_BX571966	1476380	1478893	BPSS1100	-	0.181058	8.95165	1477157	1478743
gi_52211453_emb_BX571966	1758557	1759897	BPSS1287	+	0.149254	8.345	1758557	1759168
gi_52211453_emb_BX571966	2665124	2667058	BPSS1973	+	0.317477	8.20521	2665351	2666259
gi_52211453_emb_BX571966	2821619	2822863	BPSS2085	-	0.406752	8.17194	2821619	2822125
gi_52211453_emb_BX571966	304350	305177	BPSS0225	+	0.0749698	8	304350	304412
gi_52211453_emb_BX571966	88287	88592	BPSS0077A	+	0.318033	7.84536	88287	88384
gi_52211453_emb_BX571966	532668	533243	tnpR	+	0.196522	7.69027	532668	532781
gi_52211453_emb_BX571966	495489	496688	tyrB	-	0.168474	7.58416	495489	495691
gi_52211453_emb_BX571966	603915	605813	BPSS0441	+	0.238145	7.54867	604525	604977
gi_52211453_emb_BX571966	1274424	1276016	BPSS0964	-	0.384422	7.4085	1275404	1276016
gi_52211453_emb_BX571966	953131	954333	BPSS0708	+	0.235441	7.39929	953131	953414
gi_52211453_emb_BX571966	2512421	2514517	BPSS1850	-	0.263359	7.24094	2513965	2514517
gi_52211453_emb_BX571966	1923507	1924622	BPSS1411	+	0.10852	7.2314	1924473	1924594
gi_52211453_emb_BX571966	91706	93946	BPSS0079	+	0.212054	7.20421	92293	93946
gi_52211453_emb_BX571966	131327	135061	BPSS0106	+	0.106588	7.07286	132027	132425
gi_52211453_emb_BX571966	493316	494287	BPSS0353	-	0.0278064	7	494260	494287
gi_52211453_emb_BX571966	2180594	2181328	BPSS1604	-	0.0408719	7	2180594	2180624
gi_52211453_emb_BX571966	105290	107227	BPSS0088	+	0.284977	6.80616	105290	106389
gi_52211453_emb_BX571966	1172547	1173671	BPSS0879	+	0.366548	6.54126	1172547	1172959
gi_52211453_emb_BX571966	2462431	2463285	BPSS1803	+	0.571429	6.44672	2462431	2462919
gi_52211453_emb_BX571966	121159	122508	BPSS0101	+	0.444033	6.31553	121522	122121
gi_52211453_emb_BX571966	2687491	2689113	BPSS1987	+	0.0357583	6.25862	2688919	2688977
gi_52211453_emb_BX571966	616361	617449	BPSS0451	-	0.671875	6.19836	616714	617449
gi_52211453_emb_BX571966	2702920	2705784	BPSS1998	-	0.241271	6.17366	2704395	2705086
gi_52211453_emb_BX571966	2840542	2842050	BPSS2099	-	0.192971	6.04124	2840990	2841281
gi_52211453_emb_BX571966	3018081	3020396	BPSS2246	-	0.138229	5.8875	3019870	3020190
gi_52211453_emb_BX571966	2887571	2889091	BPSS2132	-	0.4625	5.77667	2887571	2888952
gi_52211453_emb_BX571966	2798378	2799457	BPSS2064	-	0.0639481	5.49275	2799377	2799446
gi_52211453_emb_BX571966	151956	152618	BPSS0119	-	0.60574	5.40648	151971	152372
gi_52211453_emb_BX571966	649327	651861	BPSS0479	+	0.0745856	5.39683	649578	649767
gi_52211453_emb_BX571966	99533	101128	BPSS0086	-	0.139185	5.39189	99619	99841
gi_52211453_emb_BX571966	1891215	1892744	BPSS1384	-	0.173316	5.37358	1891897	1892708
gi_52211453_emb_BX571966	772931	773881	BPSS0566	+	0.603158	5.35253	772931	773504
gi_52211453_emb_BX571966	1270105	1273500	BPSS0962	+	0.492489	5.32656	1270171	1273196
gi_52211453_emb_BX571966	3161120	3163402	BPSS2345	+	0.0714286	5.20245	3161938	3163342
gi_52211453_emb_BX571966	1663300	1663770	BPSS1231	-	0.751064	5.08499	1663417	1663770
gi_52211453_emb_BX571966	395439	396971	BPSS0294	+	0.0254569	5	395439	395478
gi_52211453_emb_BX571966	1283573	1284991	BPSS0970	+	0.0874471	5	1284867	1284991
gi_52211453_emb_BX571966	1644100	1644699	BPSS1217	+	0.320534	5	1644384	1644576
gi_52211453_emb_BX571966	1016647	1016949	BPSS0756	-	0.317881	4.88542	1016853	1016949
gi_52211453_emb_BX571966	1499785	1500882	BPSS1118	+	0.289881	4.8239	1499785	1500263
gi_52211453_emb_BX571966	2927755	2928762	BPSS2165	+	0.355511	4.78771	2928219	2928577
gi_52211453_emb_BX571966	2418016	2418900	ispA	-	0.466063	4.67961	2418362	2418774
gi_52211453_emb_BX571966	2770766	2780077	BPSS2053	-	0.218022	4.63202	2772310	2778739
gi_52211453_emb_BX571966	159632	160324	BPSS0124	+	0.426301	4.60678	160014	160309
gi_52211453_emb_BX571966	157968	158624	BPSS0123	-	0.652439	4.58411	157968	158624
gi_52211453_emb_BX571966	892577	894607	BPSS0658	+	0.253202	4.33852	892577	894607
gi_52211453_emb_BX571966	769544	771247	BPSS0564	-	0.116853	4.28141	769615	769814
gi_52211453_emb_BX571966	901100	901996	BPSS0665	+	0.524554	4.23191	901257	901786
gi_52211453_emb_BX571966	909175	910872	BPSS0671	+	0.127873	4.21659	909704	909921
gi_52211453_emb_BX571966	377013	378707	BPSS0282	+	0.0171192	4	377719	377748
gi_52211453_emb_BX571966	639178	640512	BPSS0469	-	0.0262369	4	639994	640029
gi_52211453_emb_BX571966	358089	358871	argT	-	0.122762	4	358430	358526
gi_52211453_emb_BX571966	2421642	2422517	BPSS1767	-	0.328	3.95122	2422230	2422517
gi_52211453_emb_BX571966	890647	891024	BPSS0656	+	0.734748	3.9278	890647	890924
gi_52211453_emb_BX571966	2173522	2174820	pilO	-	0.251156	3.85276	2174410	2174736
gi_52211453_emb_BX571966	974797	975591	BPSS0725	-	0.15869	3.71429	975240	975366
gi_52211453_emb_BX571966	1795244	1796458	estA	-	0.185338	3.71111	1795840	1796065
gi_52211453_emb_BX571966	2327816	2328310	BPSS1693	-	0.398785	3.65482	2327816	2328013
gi_52211453_emb_BX571966	570903	573890	BPSS0415	-	0.258788	3.61708	571010	571783

gi_52211453_emb_BX571966	1498963	1499634	BPSS1117	-	0.272727	3.45902	1499451	1499634
gi_52211453_emb_BX571966	1212527	1213438	BPSS0919	+	0.360044	3.45732	1212527	1213032
gi_52211453_emb_BX571966	1006475	1006846	BPSS0748	-	0.784367	3.44674	1006532	1006823
gi_52211453_emb_BX571966	1326251	1327483	BPSS1005	-	0.519481	3.44531	1326475	1327115
gi_52211453_emb_BX571966	401900	403765	BPSS0299	-	0.251475	3.4371	402775	403244
gi_52211453_emb_BX571966	1812770	1813786	BPSS1324	-	0.0935039	3.36842	1812803	1812898
gi_52211453_emb_BX571966	1626389	1628635	BPSS1204	+	0.243099	3.3315	1626389	1627258
gi_52211453_emb_BX571966	1341949	1359456	BPSS1007	+	0.024733	3.32564	1349107	1349540
gi_52211453_emb_BX571966	2178792	2180597	BPSS1603	-	0.0221607	3.325	2180557	2180597
gi_52211453_emb_BX571966	1633710	1635902	BPSS1212	-	0.0310219	3.32353	1635294	1635362
gi_52211453_emb_BX571966	3092021	3094897	BPSS2299	+	0.102225	3.29252	3093457	3093751
gi_52211453_emb_BX571966	174740	175159	BPSS0135	+	0.355609	3.26846	174870	175019
gi_52211453_emb_BX571966	1755323	1757467	BPSS1285	-	0.0475746	3.2451	1757314	1757416
gi_52211453_emb_BX571966	1649914	1650915	araF	+	0.283716	3.23239	1649914	1650198
gi_52211453_emb_BX571966	2645187	2646128	BPSS1957	-	0.241233	3.22026	2645901	2646128
gi_52211453_emb_BX571966	1926431	1927135	BPSS1414	+	0.747159	3.12167	1926527	1927053
gi_52211453_emb_BX571966	2390190	2391284	lipA1	-	0.235832	3.1124	2391026	2391284
gi_52211453_emb_BX571966	1758015	1758188	BPSS1286a	-	0.462428	3.0875	1758108	1758188
gi_52211453_emb_BX571966	1304382	1305131	BPSS0986	+	0.353805	3.0717	1304382	1304664
gi_52211453_emb_BX571966	247624	248283	BPSS0184	+	0.517451	3	247656	247997
gi_52211453_emb_BX571966	266228	268741	BPSS0200	+	0.0939117	3	268336	268572
gi_52211453_emb_BX571966	522852	525719	BPSS0382	-	0.0153471	3	523511	523555
gi_52211453_emb_BX571966	2269250	2269741	BPSS1650	+	0.0570265	3	2269250	2269278
gi_52211453_emb_BX571966	3134787	3141608	BPSS2328	-	0.009676	3	3136748	3136814
gi_52211453_emb_BX571966	44232	45629	pcaB	+	0.0171797	3	45121	45145
gi_52211453_emb_BX571966	365585	366787	pcaF	+	0.120632	3	366025	366170
gi_52211453_emb_BX571966	2103329	2103631	BPSS1549	+	1	2.9702	2103329	2103631
gi_52211453_emb_BX571966	2438111	2438509	BPSS1778	+	0.947236	2.96552	2438111	2438497
gi_52211453_emb_BX571966	2332398	2333246	BPSS1698	-	0.0860849	2.9589	2332486	2332559
gi_52211453_emb_BX571966	1316050	1317054	BPSS0996	-	0.584661	2.82794	1316288	1316875
gi_52211453_emb_BX571966	1192136	1193809	BPSS0902	+	0.272564	2.80921	1193176	1193750
gi_52211453_emb_BX571966	898946	899656	BPSS0664	+	0.688732	2.80573	899167	899656
gi_52211453_emb_BX571966	1095327	1101467	BPSS0817	-	0.0488599	2.76667	1096140	1096440
gi_52211453_emb_BX571966	2365086	2367803	acnA	+	0.380493	2.72948	2367369	2367503
gi_52211453_emb_BX571966	2109379	2111076	BPSS1555	+	0.130819	2.72523	2109557	2109779
gi_52211453_emb_BX571966	410865	423266	BPSS0306	-	0.025885	2.71651	411020	418659
gi_52211453_emb_BX571966	2509734	2510318	BPSS1847	+	0.125	2.71233	2509740	2509813
gi_52211453_emb_BX571966	312200	313861	BPSS0229	-	0.131848	2.70776	312316	312535
gi_52211453_emb_BX571966	2563271	2564527	BPSS1888	-	0.0835987	2.69524	2563360	2563465
gi_52211453_emb_BX571966	319052	320464	BPSS0235	-	0.43272	2.69394	319276	319887
gi_52211453_emb_BX571966	1797052	1798512	BPSS1312	+	0.030137	2.68182	1797469	1797513
gi_52211453_emb_BX571966	2799869	2801308	BPSS2065	-	0.0250174	2.66667	2799946	2799982
gi_52211453_emb_BX571966	1874364	1875749	sdaB	-	0.101805	2.65248	1875608	1875749
gi_52211453_emb_BX571966	1076062	1076697	BPSS0803	+	0.480315	2.65246	1076296	1076601
gi_52211453_emb_BX571966	2544620	2546674	BPSS1873	-	0.0608569	2.624	2545476	2545601
gi_52211453_emb_BX571966	2959383	2960573	BPSS2192	+	0.25042	2.60067	2959498	2959796
gi_52211453_emb_BX571966	2316694	2318160	BPSS1685	-	0.130286	2.59686	2317149	2317340
gi_52211453_emb_BX571966	1297191	1298306	BPSS0979	+	0.423318	2.57203	1297834	1298306
gi_52211453_emb_BX571966	2368050	2370776	BPSS1727	-	0.12069	2.53799	2368884	2369213
gi_52211453_emb_BX571966	2796704	2797141	BPSS2062	-	0.386728	2.52663	2796915	2797084
gi_52211453_emb_BX571966	392243	395428	BPSS0293	+	0.264678	2.49822	392331	395428
gi_52211453_emb_BX571966	1832696	1833628	BPSS1342	-	0.418455	2.47949	1832768	1833158
gi_52211453_emb_BX571966	341809	342303	BPSS0254	-	0.182186	2.46667	342132	342222
gi_52211453_emb_BX571966	73093	75045	BPSS0065	+	0.248975	2.43827	74559	75045
gi_52211453_emb_BX571966	2785928	2787196	BPSS2055	-	0.0725552	2.42391	2785976	2786068
gi_52211453_emb_BX571966	2933349	2934509	BPSS2169	+	0.262069	2.38816	2934205	2934509
gi_52211453_emb_BX571966	1500933	1503989	BPSS1119	+	0.128272	2.38776	1501097	1503261
gi_52211453_emb_BX571966	2857037	2858941	BPSS2110	-	0.0609244	2.37931	2858401	2858517
gi_52211453_emb_BX571966	2001096	2002322	BPSS1467	-	0.323002	2.36616	2001926	2002322
gi_52211453_emb_BX571966	2266833	2269253	BPSS1649	+	0.213636	2.34816	2267916	2269253
gi_52211453_emb_BX571966	960706	961941	BPSS0713	+	0.208097	2.33463	960910	961167
gi_52211453_emb_BX571966	1895431	1899264	BPSS1386	-	0.178711	2.32847	1897192	1899085
gi_52211453_emb_BX571966	2391608	2393857	BPSS1742	-	0.108493	2.31557	2393218	2393462

gi_52211453_emb_BX571966	1198390	1199796	BPSS0907	+	0.197724	2.22662	1199389	1199667
gi_52211453_emb_BX571966	1073860	1074297	BPSS0801	+	0.354691	2.2	1073860	1074015
gi_52211453_emb_BX571966	1800598	1803501	ileS	-	0.0120565	2.2	1802132	1802167
gi_52211453_emb_BX571966	2547224	2548900	BPSS1875	-	0.0369928	2.19355	2547455	2547517
gi_52211453_emb_BX571966	980533	982194	BPSS0731	+	0.0716436	2.19328	980827	980946
gi_52211453_emb_BX571966	1104095	1106299	BPSS0820	+	0.225953	2.17269	1104408	1106294
gi_52211453_emb_BX571966	885526	886344	BPSS0652A	+	0.183374	2.16667	886047	886197
gi_52211453_emb_BX571966	1063333	1068294	BPSS0796	+	0.0290264	2.16667	1063333	1064151
gi_52211453_emb_BX571966	2225494	2238816	BPSS1633	-	0.0827203	2.15608	2225886	2234645
gi_52211453_emb_BX571966	542523	543698	BPSS0402	+	0.32766	2.10649	542523	542908
gi_52211453_emb_BX571966	2693248	2695182	BPSS1992	-	0.0594623	2.10435	2694933	2695182
gi_52211453_emb_BX571966	1835968	1838085	BPSS1346	+	0.31129	2.10167	1836246	1837295
gi_52211453_emb_BX571966	2318209	2320389	BPSS1686	-	0.0811927	2.09605	2320212	2320389
gi_52211453_emb_BX571966	2954506	2955888	BPSS2188	+	0.237337	2.09146	2955496	2955824
gi_52211453_emb_BX571966	2964244	2965221	BPSS2197	+	0.16479	2.0559	2965060	2965221
gi_52211453_emb_BX571966	1751486	1752982	BPSS1282	-	0.11631	2.03448	1751970	1752144
gi_52211453_emb_BX571966	85817	86671	BPSS0076	+	0.748244	2.01252	85945	86671
gi_52211453_emb_BX571966	134954	136312	BPSS0108	-	0.0154639	2	135548	135569
gi_52211453_emb_BX571966	479646	480593	BPSS0346	+	0.0908131	2	480379	480465
gi_52211453_emb_BX571966	681027	683675	BPSS0500	+	0.0162387	2	682761	682804
gi_52211453_emb_BX571966	854697	855791	BPSS0626	+	0.351005	2	855269	855653
gi_52211453_emb_BX571966	923681	924037	BPSS0683	-	0.120787	2	923681	923724
gi_52211453_emb_BX571966	929989	930711	BPSS0688	-	0.0512465	2	930059	930096
gi_52211453_emb_BX571966	1012328	1012648	BPSS0753	-	0.1125	2	1012612	1012648
gi_52211453_emb_BX571966	1012673	1014904	BPSS0754	-	0.0233079	2	1012673	1012725
gi_52211453_emb_BX571966	1020817	1022049	BPSS0760	+	0.101461	2	1021924	1022049
gi_52211453_emb_BX571966	1073131	1073745	BPSS0800	-	0.166124	2	1073643	1073745
gi_52211453_emb_BX571966	1140420	1141766	BPSS0851	+	0.106241	2	1140488	1140631
gi_52211453_emb_BX571966	1432704	1432970	BPSS1053	+	0.221805	2	1432704	1432763
gi_52211453_emb_BX571966	1497078	1498832	BPSS1116	+	0.13797	2	1497428	1497670
gi_52211453_emb_BX571966	1536182	1536955	BPSS1148	+	0.0336352	2	1536423	1536449
gi_52211453_emb_BX571966	1610399	1619863	BPSS1197	-	0.00750211	2	1611686	1611757
gi_52211453_emb_BX571966	2033784	2035334	BPSS1492	+	0.0593548	2	2035242	2035334
gi_52211453_emb_BX571966	2036034	2037980	BPSS1493	-	0.0400822	2	2036693	2036771
gi_52211453_emb_BX571966	2309745	2310872	BPSS1681	+	0.210293	2	2310056	2310293
gi_52211453_emb_BX571966	2521809	2523041	BPSS1857	-	0.137987	2	2521809	2521979
gi_52211453_emb_BX571966	2577069	2578016	BPSS1900	-	0.291447	2	2577248	2577524
gi_52211453_emb_BX571966	2641877	2643280	BPSS1955	+	0.0791162	2	2643055	2643166
gi_52211453_emb_BX571966	2689110	2690126	BPSS1988	+	0.0748031	2	2689139	2689215
gi_52211453_emb_BX571966	2903723	2905414	BPSS2145	-	0.148433	2	2904326	2904577
gi_52211453_emb_BX571966	3153366	3154073	BPSS2338	-	0.0367751	2	3153366	3153392
gi_52211453_emb_BX571966	2093755	2095062	bsaS	-	0.141546	2	2094391	2094576
gi_52211453_emb_BX571966	1417105	1420338	czcA	-	0.00556758	2	1419524	1419542
gi_52211453_emb_BX571966	2287679	2288593	fdoH	-	0.0185996	2	2287679	2287696
gi_52211453_emb_BX571966	2287056	2287682	fdoI	-	0.255591	2	2287522	2287682
gi_52211453_emb_BX571966	1868394	1868855	folB	-	0.281996	2	1868631	1868761
gi_52211453_emb_BX571966	936566	937414	hpcB	+	0.123821	2	937309	937414
gi_52211453_emb_BX571966	1143269	1144201	BPSS0853	-	0.196352	1.99454	1143907	1144090
gi_52211453_emb_BX571966	1076755	1077132	BPSS0804	-	0.413793	1.99359	1076976	1077132
gi_52211453_emb_BX571966	115675	117351	BPSS0096	+	0.153938	1.99225	117023	117281
gi_52211453_emb_BX571966	1077778	1079844	BPSS0805	-	0.0561471	1.99138	1078982	1079098
gi_52211453_emb_BX571966	550540	562935	BPSS0409	-	0.0761597	1.98729	553248	562566
gi_52211453_emb_BX571966	2805239	2806207	BPSS2070	-	0.357438	1.98555	2805259	2805605
gi_52211453_emb_BX571966	1593544	1594350	BPSS1187	+	0.168734	1.98529	1593800	1593936
gi_52211453_emb_BX571966	756804	758072	BPSS0554	+	0.318612	1.98515	757533	757937
gi_52211453_emb_BX571966	786264	787037	livG	+	0.080207	1.98387	786443	786505
gi_52211453_emb_BX571966	2255243	2256574	cat2	-	0.114951	1.98039	2255554	2255707
gi_52211453_emb_BX571966	1004758	1005855	BPSS0747	+	0.0865998	1.97895	1004758	1004853
gi_52211453_emb_BX571966	2768149	2769918	BPSS2052	-	0.308649	1.97253	2769134	2769918
gi_52211453_emb_BX571966	2743882	2745498	BPSS2031	+	0.112624	1.96703	2745315	2745497
gi_52211453_emb_BX571966	847418	848212	BPSS0621	+	0.175063	1.96403	847667	847806
gi_52211453_emb_BX571966	1691427	1693619	BPSS1249	+	0.0364964	1.9625	1692647	1692727
gi_52211453_emb_BX571966	1943761	1944660	BPSS1429	+	0.057842	1.96154	1943863	1943915

gi_52211453_emb_BX571966	2520736	2521812	BPSS1856	-	0.202602	1.95872	2521339	2521812
gi_52211453_emb_BX571966	2922210	2923289	BPSS2160	+	0.109361	1.95763	2922210	2922328
gi_52211453_emb_BX571966	1632033	1633571	BPSS1211	-	0.0149545	1.95652	1632357	1632380
gi_52211453_emb_BX571966	1250756	1251091	BPSS0949	-	0.241791	1.92593	1251010	1251091
gi_52211453_emb_BX571966	1785706	1786626	BPSS1305	-	0.356522	1.92073	1786145	1786473
gi_52211453_emb_BX571966	34692	35642	BPSS0035	+	0.0484211	1.91304	34765	34811
gi_52211453_emb_BX571966	2993473	2994231	BPSS2219	+	0.0751979	1.91228	2994174	2994231
gi_52211453_emb_BX571966	542377	542526	BPSS0401	+	0.758389	1.90265	542413	542526
gi_52211453_emb_BX571966	217017	217988	BPSS0164	+	0.0267765	1.88462	217590	217616
gi_52211453_emb_BX571966	1425780	1426265	BPSS1046	+	0.725773	1.875	1425780	1426198
gi_52211453_emb_BX571966	1168399	1169010	BPSS0875	-	0.535188	1.86239	1168540	1168925
gi_52211453_emb_BX571966	975934	977442	BPSS0726	-	0.0855438	1.85271	976061	976190
gi_52211453_emb_BX571966	1790641	1791687	BPSS1308	-	0.250478	1.85115	1791325	1791587
gi_52211453_emb_BX571966	607554	608903	BPSS0443	+	0.209044	1.84397	607873	608809
gi_52211453_emb_BX571966	741664	743229	BPSS0543	-	0.149521	1.83761	742995	743229
gi_52211453_emb_BX571966	208096	210993	BPSS0159	+	0.0800828	1.8319	210258	210964
gi_52211453_emb_BX571966	580405	581478	rfbG	+	0.44548	1.83054	580778	581364
gi_52211453_emb_BX571966	2792731	2793330	BPSS2058	-	0.223706	1.82836	2793193	2793327
gi_52211453_emb_BX571966	1022049	1023305	codA	+	0.334395	1.81667	1022049	1023226
gi_52211453_emb_BX571966	2870209	2871330	BPSS2121	+	0.131133	1.80272	2870235	2870382
gi_52211453_emb_BX571966	667638	669245	ahpF	-	0.288114	1.77754	667799	668262
gi_52211453_emb_BX571966	2831227	2833431	BPSS2093	-	0.1951	1.77209	2831796	2832226
gi_52211453_emb_BX571966	1743703	1744773	cnrT	+	0.0607477	1.75385	1744533	1744598
gi_52211453_emb_BX571966	428856	437384	BPSS0311	-	0.0259146	1.74661	428986	429831
gi_52211453_emb_BX571966	2913435	2914022	BPSS2153	-	0.115843	1.73529	2913879	2913947
gi_52211453_emb_BX571966	86668	87699	BPSS0077	+	0.29001	1.72575	86668	87063
gi_52211453_emb_BX571966	999777	1001294	BPSS0743	+	0.320369	1.72016	1000494	1000980
gi_52211453_emb_BX571966	2370877	2372568	BPSS1728	-	0.077469	1.71756	2371836	2371967
gi_52211453_emb_BX571966	834728	836518	BPSS0612	-	0.127374	1.71491	835472	835700
gi_52211453_emb_BX571966	2277526	2279721	bgIB	+	0.1959	1.71163	2277526	2279575
gi_52211453_emb_BX571966	157098	157745	BPSS0122	-	0.347759	1.71111	157189	157745
gi_52211453_emb_BX571966	2624360	2625484	BPSS1939	+	0.022242	1.68	2625459	2625484
gi_52211453_emb_BX571966	2397872	2398204	BPSS1748	-	0.225904	1.66667	2398037	2398112
gi_52211453_emb_BX571966	1310767	1312284	katB	+	0.255109	1.65375	1310857	1311374
gi_52211453_emb_BX571966	177878	178165	BPSS0137	+	0.463415	1.64662	177878	178011
gi_52211453_emb_BX571966	1038984	1039424	BPSS0778	-	0.443182	1.6359	1039172	1039367
gi_52211453_emb_BX571966	3152167	3152919	glnH	-	0.5625	1.59574	3152496	3152919
gi_52211453_emb_BX571966	2322038	2323081	gca	+	0.511026	1.59099	2322186	2322916
gi_52211453_emb_BX571966	485360	486852	BPSSr01	+	0.671582	1.59082	485543	486852
gi_52211453_emb_BX571966	529868	532291	BPSS0385	+	0.143211	1.57637	530437	532291
gi_52211453_emb_BX571966	2238813	2248688	BPSS1634	-	0.051443	1.56299	2240664	2242711
gi_52211453_emb_BX571966	2657833	2658741	BPSS1968	+	0.269824	1.5551	2658121	2658366
gi_52211453_emb_BX571966	1544724	1548527	narG	-	0.171444	1.55215	1545210	1547694
gi_52211453_emb_BX571966	658624	662499	BPSS0486	+	0.0856774	1.54819	660577	661692
gi_52211453_emb_BX571966	1513324	1514727	BPSS1128	+	0.0798289	1.54464	1513546	1513658
gi_52211453_emb_BX571966	1919731	1920690	BPSS1406	+	0.308655	1.54054	1920267	1920563
gi_52211453_emb_BX571966	820930	821088	BPSS0599	+	0.582278	1.51087	820930	821022
gi_52211453_emb_BX571966	998211	999566	BPSS0742	+	0.139483	1.50265	998885	999074
gi_52211453_emb_BX571966	2044052	2045794	BPSS1500	+	0.316877	1.47826	2044899	2045451
gi_52211453_emb_BX571966	2908478	2909989	BPSS2149	-	0.25546	1.4715	2908720	2909106
gi_52211453_emb_BX571966	1666895	1667707	BPSS1234	+	0.402709	1.46177	1667143	1667470
gi_52211453_emb_BX571966	1305249	1305593	BPSS0987	-	0.25	1.44186	1305507	1305593
gi_52211453_emb_BX571966	2965276	2966235	BPSS2198	+	0.260688	1.436	2965276	2966213
gi_52211453_emb_BX571966	170998	171984	BPSS0131	+	0.0567951	1.41071	171022	171755
gi_52211453_emb_BX571966	932953	933390	BPSS0691	-	0.356979	1.35897	933234	933390
gi_52211453_emb_BX571966	487486	490367	BPSSr02	+	0.459216	1.35752	488097	490201
gi_52211453_emb_BX571966	1448290	1449165	BPSS1077	-	0.198857	1.35632	1448991	1449165
gi_52211453_emb_BX571966	56852	62767	uvrA	+	0.0101437	1.35	58040	58737
gi_52211453_emb_BX571966	2288604	2291675	fdoG	-	0.27255	1.34528	2290484	2291321
gi_52211453_emb_BX571966	2207213	2225497	BPSS1632	-	0.04627	1.33806	2213047	2217623
gi_52211453_emb_BX571966	1243885	1245039	BPSS0943	+	0.354419	1.33252	1243916	1244325
gi_52211453_emb_BX571966	944313	946082	BPSS0703	-	0.107971	1.32461	945646	945837
gi_52211453_emb_BX571966	2133908	2134765	tauC	-	0.276546	1.30802	2134324	2134561

gi_52211453_emb_BX571966	1976503	1978822	BPSS1450	+	0.114705	1.29699	1977866	1978132
gi_52211453_emb_BX571966	3722	4921	kbl	+	0.206005	1.2915	3995	4242
gi_52211453_emb_BX571966	213569	215074	BPSS0162	+	0.192691	1.28276	214538	214916
gi_52211453_emb_BX571966	1938234	1939232	BPSS1424	-	0.151303	1.27815	1939081	1939232
gi_52211453_emb_BX571966	2423237	2425030	BPSS1768	+	0.0663692	1.2605	2423822	2423941
gi_52211453_emb_BX571966	476085	477194	BPSS0343	+	0.174031	1.25389	476915	477108
gi_52211453_emb_BX571966	1430895	1432688	BPSS1052	-	0.0440602	1.24051	1432353	1432688
gi_52211453_emb_BX571966	110792	111529	BPSS0092	+	0.213026	1.23567	111098	111255
gi_52211453_emb_BX571966	2701464	2702273	oxa	-	0.343634	1.23022	2701506	2701784
gi_52211453_emb_BX571966	2710129	2710617	BPSS2003	+	0.270492	1.22727	2710129	2710515
gi_52211453_emb_BX571966	1999417	2000928	BPSS1466	-	0.0986102	1.20805	2000778	2000927
gi_52211453_emb_BX571966	587459	588715	BPSS0425	+	0.104299	1.20611	588055	588186
gi_52211453_emb_BX571966	1487368	1488162	BPSS1109	+	0.580605	1.19523	1487445	1487906
gi_52211453_emb_BX571966	2955934	2956779	BPSS2189	+	0.518343	1.15982	2955934	2956372
gi_52211453_emb_BX571966	2363587	2365038	prpD	+	0.457615	1.15813	2363701	2364365
gi_52211453_emb_BX571966	2084259	2085518	bipC	-	0.43606	1.12022	2084334	2084883
gi_52211453_emb_BX571966	1007935	1009344	BPSS0750	+	0.142654	1.1194	1008417	1008618
gi_52211453_emb_BX571966	2892881	2894323	BPSS2136	-	0.244105	1.11364	2893971	2894323
gi_52211453_emb_BX571966	2651869	2653143	BPSS1963	-	0.463108	1.11017	2652425	2653015
gi_52211453_emb_BX571966	1721387	1734097	BPSS1269	-	0.0403619	1.07407	1723080	1730490
gi_52211453_emb_BX571966	562919	566497	BPSS0410	-	0.148127	1.05094	563283	565261
gi_52211453_emb_BX571966	37431	38354	BPSS0038	+	0.0628386	1	37967	38025
gi_52211453_emb_BX571966	55704	56372	BPSS0057	+	0.366766	1	55751	56372
gi_52211453_emb_BX571966	84913	85833	BPSS0075	+	0.0543478	1	85650	85700
gi_52211453_emb_BX571966	94259	95614	BPSS0080	+	0.0214022	1	95260	95289
gi_52211453_emb_BX571966	109043	109597	BPSS0090	-	0.323105	1	109154	109333
gi_52211453_emb_BX571966	111753	114386	BPSS0093	+	0.0273452	1	114029	114101
gi_52211453_emb_BX571966	127919	128488	BPSS0104	+	0.274165	1	128332	128488
gi_52211453_emb_BX571966	165876	167096	BPSS0129	+	0.160656	1	166837	167033
gi_52211453_emb_BX571966	168157	170964	BPSS0130	+	0.0712504	1	168766	168966
gi_52211453_emb_BX571966	203913	204674	BPSS0156	-	0.240473	1	204024	204375
gi_52211453_emb_BX571966	221397	225473	BPSS0167	-	0.100343	1	222468	224270
gi_52211453_emb_BX571966	241527	243854	BPSS0181	+	0.0855178	1	241636	241835
gi_52211453_emb_BX571966	248330	248704	BPSS0185	+	0.0802139	1	248662	248692
gi_52211453_emb_BX571966	249406	251322	BPSS0186	-	0.0600209	1	251190	251322
gi_52211453_emb_BX571966	256752	257597	BPSS0192	-	0.0508876	1	256870	256913
gi_52211453_emb_BX571966	330905	333184	BPSS0244	-	0.0886354	1	332159	332361
gi_52211453_emb_BX571966	354335	355450	BPSS0267	-	0.367713	1	354930	355340
gi_52211453_emb_BX571966	400571	401470	BPSS0298	-	0.276974	1	400621	400870
gi_52211453_emb_BX571966	408326	409807	BPSS0304	-	0.1526	1	409487	409713
gi_52211453_emb_BX571966	423325	424737	BPSS0307	-	0.148725	1	424196	424406
gi_52211453_emb_BX571966	439636	440475	BPSS0313	+	0.442193	1	439720	440091
gi_52211453_emb_BX571966	440493	441887	BPSS0314	+	0.0121951	1	440663	440680
gi_52211453_emb_BX571966	454103	454540	BPSS0325	+	0.627002	1	454103	454377
gi_52211453_emb_BX571966	456588	457880	BPSS0327	-	0.394737	1	457193	457785
gi_52211453_emb_BX571966	474336	475682	BPSS0342	+	0.236256	1	474611	474929
gi_52211453_emb_BX571966	477432	478514	BPSS0344	+	0.301294	1	477542	477868
gi_52211453_emb_BX571966	481481	482752	BPSS0348	+	0.0456334	1	482694	482752
gi_52211453_emb_BX571966	482758	484203	BPSS0349	+	0.050519	1	482758	482831
gi_52211453_emb_BX571966	505308	506279	BPSS0365	+	0.15757	1	505910	506063
gi_52211453_emb_BX571966	541537	542235	BPSS0400	-	0.0730659	1	542058	542109
gi_52211453_emb_BX571966	574629	574985	BPSS0416A	+	0.241573	1	574899	574985
gi_52211453_emb_BX571966	575855	578407	BPSS0417	+	0.0822884	1	576912	577122
gi_52211453_emb_BX571966	593393	594292	BPSS0431	-	0.057842	1	593739	593791
gi_52211453_emb_BX571966	596139	597170	BPSS0434	-	0.0320078	1	596310	596343
gi_52211453_emb_BX571966	628847	630139	BPSS0461	-	0.0348297	1	628847	628892
gi_52211453_emb_BX571966	670272	671369	BPSS0493	-	0.23701	1	671073	671333
gi_52211453_emb_BX571966	708199	709188	BPSS0521	+	0.0283114	1	708696	708724
gi_52211453_emb_BX571966	719014	720087	BPSS0526	+	0.173346	1	719598	719784
gi_52211453_emb_BX571966	720090	720806	BPSS0527	+	0.340782	1	720138	720382
gi_52211453_emb_BX571966	739867	741531	BPSS0542	-	0.199519	1	741199	741531
gi_52211453_emb_BX571966	743418	744434	BPSS0544	+	0.299213	1	743731	744035
gi_52211453_emb_BX571966	777815	778123	BPSS0571	-	0.435065	1	777943	778077

gi_52211453_emb_BX571966	819701	819895	BPSS0597	+	0.546392	1	819789	819895
gi_52211453_emb_BX571966	828849	830321	BPSS0607	-	0.0326087	1	829504	829552
gi_52211453_emb_BX571966	831174	832406	BPSS0609	-	0.0681818	1	832062	832146
gi_52211453_emb_BX571966	832403	833314	BPSS0610	-	0.169045	1	833021	833175
gi_52211453_emb_BX571966	856170	856892	BPSS0627	+	0.390582	1	856175	856457
gi_52211453_emb_BX571966	925685	926899	BPSS0685	+	0.053542	1	926076	926141
gi_52211453_emb_BX571966	972923	973993	BPSS0723	+	0.317757	1	973017	973357
gi_52211453_emb_BX571966	1050707	1051531	BPSS0785	-	0.059466	1	1051316	1051365
gi_52211453_emb_BX571966	1051720	1052733	BPSS0786	+	0.0394867	1	1051736	1051776
gi_52211453_emb_BX571966	1071034	1072254	BPSS0799	-	0.291803	1	1071405	1072108
gi_52211453_emb_BX571966	1103628	1104098	BPSS0819	+	0.0531915	1	1103965	1103990
gi_52211453_emb_BX571966	1107219	1108121	BPSS0822	+	0.0254989	1	1107339	1107362
gi_52211453_emb_BX571966	1136037	1137353	BPSS0847	-	0.0547112	1	1136522	1136594
gi_52211453_emb_BX571966	1166507	1167709	BPSS0873	+	0.0515807	1	1166507	1166569
gi_52211453_emb_BX571966	1207153	1208454	BPSS0913	+	0.0245965	1	1207716	1207748
gi_52211453_emb_BX571966	1255661	1257262	BPSS0954	-	0.0468457	1	1256127	1256202
gi_52211453_emb_BX571966	1263951	1268576	BPSS0960	+	0.0862703	1	1265614	1266013
gi_52211453_emb_BX571966	1281070	1283394	BPSS0969	-	0.230207	1	1281115	1282166
gi_52211453_emb_BX571966	1307541	1308083	BPSS0989	-	0.337638	1	1307900	1308083
gi_52211453_emb_BX571966	1328091	1341815	BPSS1006	+	0.0121685	1	1338475	1341021
gi_52211453_emb_BX571966	1399361	1400365	BPSS1028	+	0.0458167	1	1399699	1399745
gi_52211453_emb_BX571966	1428512	1428727	BPSS1048c	+	0.181395	1	1428590	1428629
gi_52211453_emb_BX571966	1447594	1448124	BPSS1076	+	0.609434	1	1447675	1447998
gi_52211453_emb_BX571966	1450276	1451181	BPSS1080	+	0.241989	1	1450408	1450627
gi_52211453_emb_BX571966	1451174	1451728	BPSS1081	+	0.106498	1	1451191	1451250
gi_52211453_emb_BX571966	1451739	1454102	BPSS1082	+	0.0592467	1	1453424	1453564
gi_52211453_emb_BX571966	1454846	1456018	BPSS1084	+	0.0460751	1	1455447	1455501
gi_52211453_emb_BX571966	1488229	1489377	BPSS1110	+	0.103659	1	1488970	1489089
gi_52211453_emb_BX571966	1504124	1505662	BPSS1120	+	0.020156	1	1504613	1504644
gi_52211453_emb_BX571966	1509034	1510017	BPSS1124	+	0.207528	1	1509375	1509579
gi_52211453_emb_BX571966	1562122	1564590	BPSS1170	-	0.0628039	1	1563660	1563815
gi_52211453_emb_BX571966	1600584	1605287	BPSS1193	-	0.011482	1	1603242	1603296
gi_52211453_emb_BX571966	1609312	1610373	BPSS1196	-	0.213949	1	1610048	1610275
gi_52211453_emb_BX571966	1651782	1653533	BPSS1222	-	0.0148487	1	1652816	1652842
gi_52211453_emb_BX571966	1705492	1706649	BPSS1259	-	0.0613656	1	1706271	1706342
gi_52211453_emb_BX571966	1716573	1719788	BPSS1266	-	0.0650078	1	1719537	1719746
gi_52211453_emb_BX571966	1747574	1749181	BPSS1279	-	0.196017	1	1748335	1748864
gi_52211453_emb_BX571966	1749935	1750861	BPSS1281	-	0.277538	1	1750083	1750340
gi_52211453_emb_BX571966	1754304	1755326	BPSS1284	-	0.0225049	1	1754431	1754454
gi_52211453_emb_BX571966	1772610	1773047	BPSS1294	-	0.235698	1	1772679	1772782
gi_52211453_emb_BX571966	1774902	1775570	BPSS1296	-	0.296407	1	1775295	1775493
gi_52211453_emb_BX571966	1858536	1860014	BPSS1358	-	0.196888	1	1858902	1859193
gi_52211453_emb_BX571966	1886475	1888661	BPSS1381	+	0.0704483	1	1887187	1887341
gi_52211453_emb_BX571966	1888658	1889674	BPSS1382	+	0.253937	1	1889349	1889607
gi_52211453_emb_BX571966	1889557	1890045	BPSS1383	+	0.102459	1	1889557	1889607
gi_52211453_emb_BX571966	1899846	1901654	BPSS1388	-	0.241704	1	1900151	1901333
gi_52211453_emb_BX571966	1939355	1940257	BPSS1425	-	0.322616	1	1939606	1939897
gi_52211453_emb_BX571966	1980962	1984240	BPSS1453	+	0.161074	1	1983284	1983907
gi_52211453_emb_BX571966	1984227	1985591	BPSS1454	+	0.0307918	1	1985495	1985537
gi_52211453_emb_BX571966	1989047	1990465	BPSS1458	-	0.0282087	1	1989221	1989261
gi_52211453_emb_BX571966	1995853	1998192	BPSS1464	+	0.0175289	1	1997485	1997526
gi_52211453_emb_BX571966	2038711	2040555	BPSS1495	-	0.200651	1	2039442	2039812
gi_52211453_emb_BX571966	2045782	2046804	BPSS1501	+	0.0596869	1	2046743	2046804
gi_52211453_emb_BX571966	2046791	2049829	BPSS1502	+	0.10632	1	2046791	2048432
gi_52211453_emb_BX571966	2049856	2052879	BPSS1503	+	0.0605359	1	2052615	2052798
gi_52211453_emb_BX571966	2052905	2055547	BPSS1504	+	0.016654	1	2054205	2054249
gi_52211453_emb_BX571966	2065185	2066609	BPSS1512	+	0.0224719	1	2065543	2065575
gi_52211453_emb_BX571966	2080097	2082739	BPSS1528	-	0.0363361	1	2081222	2081318
gi_52211453_emb_BX571966	2103000	2103269	BPSS1548	+	0.130112	1	2103234	2103269
gi_52211453_emb_BX571966	2103636	2104583	BPSS1550	+	0.0770855	1	2103636	2103709
gi_52211453_emb_BX571966	2104580	2105167	BPSS1551	+	0.0749574	1	2104627	2104671
gi_52211453_emb_BX571966	2145560	2150062	BPSS1580	-	0.0424256	1	2147633	2147824
gi_52211453_emb_BX571966	2186573	2188018	BPSS1610	-	0.141869	1	2187813	2188018

gi_52211453_emb_BX571966	2202263	2202790	BPSS1628	+	0.0664137	1	2202620	2202655
gi_52211453_emb_BX571966	2248989	2251772	BPSS1635	-	0.0459935	1	2249695	2249823
gi_52211453_emb_BX571966	2300932	2301483	BPSS1675	-	0.0598911	1	2301314	2301347
gi_52211453_emb_BX571966	2337384	2338700	BPSS1703	-	0.0744681	1	2338251	2338349
gi_52211453_emb_BX571966	2352889	2353278	BPSS1713	-	0.262211	1	2352889	2352991
gi_52211453_emb_BX571966	2400913	2401851	BPSS1751	-	0.385928	1	2400988	2401350
gi_52211453_emb_BX571966	2448563	2450620	BPSS1790	-	0.133204	1	2449724	2449998
gi_52211453_emb_BX571966	2468155	2468997	BPSS1809	-	0.174584	1	2468850	2468997
gi_52211453_emb_BX571966	2483980	2485164	BPSS1826	-	0.066723	1	2484712	2484791
gi_52211453_emb_BX571966	2503507	2504775	BPSS1841	-	0.160095	1	2503623	2503826
gi_52211453_emb_BX571966	2540279	2541307	BPSS1870	-	0.07393	1	2541013	2541089
gi_52211453_emb_BX571966	2541314	2543908	BPSS1871	-	0.0289129	1	2542927	2543002
gi_52211453_emb_BX571966	2579291	2580205	BPSS1902	-	0.16302	1	2579479	2580017
gi_52211453_emb_BX571966	2586540	2587592	BPSS1910	+	0.0912548	1	2586868	2586964
gi_52211453_emb_BX571966	2617380	2618246	BPSS1935	-	0.0334873	1	2617380	2617409
gi_52211453_emb_BX571966	2636155	2636856	BPSS1949	-	0.108417	1	2636626	2636702
gi_52211453_emb_BX571966	2655961	2656866	BPSS1966	+	0.0475138	1	2656662	2656705
gi_52211453_emb_BX571966	2658738	2660336	BPSS1969	+	0.0281602	1	2659943	2659988
gi_52211453_emb_BX571966	2667859	2669577	BPSS1974	+	0.0291036	1	2668062	2668112
gi_52211453_emb_BX571966	2721751	2722743	BPSS2014	-	0.153226	1	2722006	2722158
gi_52211453_emb_BX571966	2747508	2749520	BPSS2034	+	0.13171	1	2748348	2748613
gi_52211453_emb_BX571966	2757841	2759694	BPSS2042	+	0.0906638	1	2759523	2759691
gi_52211453_emb_BX571966	2767010	2768149	BPSS2051	-	0.196664	1	2767372	2767596
gi_52211453_emb_BX571966	2781283	2785914	BPSS2054	-	0.0611099	1	2782063	2782346
gi_52211453_emb_BX571966	2806228	2807226	BPSS2071	-	0.0440882	1	2806521	2806565
gi_52211453_emb_BX571966	2814054	2816087	BPSS2080	-	0.0905066	1	2815336	2815520
gi_52211453_emb_BX571966	2833428	2836094	BPSS2094	-	0.110653	1	2835196	2835491
gi_52211453_emb_BX571966	2837548	2839419	BPSS2096	+	0.00908605	1	2838427	2838444
gi_52211453_emb_BX571966	2855558	2856994	BPSS2109	+	0.0473538	1	2856089	2856157
gi_52211453_emb_BX571966	2885962	2886252	BPSS2131	-	0.175862	1	2885962	2886013
gi_52211453_emb_BX571966	2886710	2887267	BPSS2131b	-	0.181329	1	2886962	2887063
gi_52211453_emb_BX571966	2901507	2903009	BPSS2143	+	0.121838	1	2901719	2901902
gi_52211453_emb_BX571966	2905720	2906661	BPSS2146	-	0.398512	1	2905937	2906312
gi_52211453_emb_BX571966	2919996	2920745	BPSS2158	-	0.148198	1	2920431	2920542
gi_52211453_emb_BX571966	2930811	2932001	BPSS2167	-	0.156303	1	2931104	2931290
gi_52211453_emb_BX571966	2941725	2942777	BPSS2175	-	0.0836502	1	2941868	2941956
gi_52211453_emb_BX571966	2944785	2945741	BPSS2177	+	0.222803	1	2945162	2945526
gi_52211453_emb_BX571966	2950975	2952216	BPSS2184	-	0.13618	1	2951598	2951767
gi_52211453_emb_BX571966	2960597	2961139	BPSS2193	+	0.107011	1	2960614	2960997
gi_52211453_emb_BX571966	2976263	2977177	BPSS2207	+	0.11488	1	2977004	2977109
gi_52211453_emb_BX571966	2994290	2995033	BPSS2220	+	0.0121131	1	2994290	2994299
gi_52211453_emb_BX571966	3042681	3044030	BPSS2265	-	0.266123	1	3042955	3043314
gi_52211453_emb_BX571966	3073434	3075266	BPSS2285	+	0.120087	1	3073859	3074079
gi_52211453_emb_BX571966	3084437	3085498	BPSS2292	+	0.0263902	1	3085145	3085173
gi_52211453_emb_BX571966	3087533	3088552	BPSS2295	+	0.247301	1	3088248	3088500
gi_52211453_emb_BX571966	3095766	3096716	BPSS2301	+	0.231579	1	3096415	3096635
gi_52211453_emb_BX571966	3106526	3107698	BPSS2306	-	0.056314	1	3107632	3107698
gi_52211453_emb_BX571966	3128448	3129149	BPSS2325	-	0.154066	1	3129041	3129149
gi_52211453_emb_BX571966	3129149	3130636	BPSS2326	-	0.0322798	1	3129149	3129197
gi_52211453_emb_BX571966	3130669	3134790	BPSS2327	-	0.0361563	1	3133630	3133779
gi_52211453_emb_BX571966	1040382	1040466	BPSSst04	-	1	1	1040382	1040466
gi_52211453_emb_BX571966	669449	670012	ahpC	-	0.124334	1	669504	669574
gi_52211453_emb_BX571966	2436429	2437955	amn	-	0.177588	1	2437594	2437955
gi_52211453_emb_BX571966	2150059	2151579	bcsZ	-	0.109211	1	2150382	2150548
gi_52211453_emb_BX571966	1849107	1850576	betB	+	0.0707965	1	1849673	1849777
gi_52211453_emb_BX571966	2100565	2101206	bsaN	-	0.0390016	1	2100643	2100668
gi_52211453_emb_BX571966	2098689	2100551	bsaO	-	0.146617	1	2098769	2099042
gi_52211453_emb_BX571966	2567962	2568864	catA	+	0.189579	1	2568036	2568207
gi_52211453_emb_BX571966	52852	53847	chrB	-	0.115578	1	52852	52967
gi_52211453_emb_BX571966	2570253	2572265	cyoB	-	0.128231	1	2570829	2571087
gi_52211453_emb_BX571966	3157746	3158651	estC	+	0.038674	1	3157959	3157994
gi_52211453_emb_BX571966	1160056	1161558	feaB	+	0.231025	1	1160964	1161454
gi_52211453_emb_BX571966	2329162	2330475	folC	-	0.0441736	1	2329710	2329768

gi_52211453_emb_BX571966	880135	881091	frtA	+	0.117155	1	880870	880982
gi_52211453_emb_BX571966	1493693	1495693	ftsH	-	0.0165	1	1494859	1494892
gi_52211453_emb_BX571966	375588	376871	gabT	-	0.183944	1	375588	375824
gi_52211453_emb_BX571966	2398403	2399818	gnd	-	0.134276	1	2398403	2399753
gi_52211453_emb_BX571966	2468994	2469938	ilvE	-	0.127119	1	2468994	2469114
gi_52211453_emb_BX571966	2389152	2390186	lipB	-	0.0686654	1	2389227	2389298
gi_52211453_emb_BX571966	2875583	2876725	lldA	+	0.0402802	1	2875894	2875940
gi_52211453_emb_BX571966	844881	846410	mmsA	+	0.150425	1	844896	845126
gi_52211453_emb_BX571966	2695482	2696984	mprA	-	0.177097	1	2696025	2696291
gi_52211453_emb_BX571966	1543198	1544727	narH	-	0.211249	1	1543897	1544220
gi_52211453_emb_BX571966	2897534	2898472	oppB	-	0.0426439	1	2898138	2898178
gi_52211453_emb_BX571966	2895629	2896618	oppD	-	0.372093	1	2895820	2896188
gi_52211453_emb_BX571966	2894499	2895632	oppF	-	0.00617829	1	2894499	2894506
gi_52211453_emb_BX571966	985782	987641	oprM	-	0.0188273	1	987451	987486
gi_52211453_emb_BX571966	1781580	1782173	pcaG	+	0.0860034	1	1781814	1781865
gi_52211453_emb_BX571966	1780873	1781577	pcaH	+	0.205966	1	1781206	1781351
gi_52211453_emb_BX571966	800407	806454	pchF	+	0.00446502	1	804920	804947
gi_52211453_emb_BX571966	2174832	2176601	piiN	-	0.0825325	1	2175217	2175363
gi_52211453_emb_BX571966	2170335	2171411	piiR	-	0.0167286	1	2170335	2170353
gi_52211453_emb_BX571966	2426971	2429742	polA	-	0.0187658	1	2428215	2429529
gi_52211453_emb_BX571966	636535	637656	potF	-	0.197145	1	637378	637599
gi_52211453_emb_BX571966	633288	634217	potI	-	0.106566	1	633697	633796
gi_52211453_emb_BX571966	278428	279321	prpB	+	0.0257559	1	279203	279226
gi_52211453_emb_BX571966	2326228	2327763	purF	-	0.120521	1	2327419	2327604
gi_52211453_emb_BX571966	344068	345045	rbsC	+	0.126919	1	344788	344912
gi_52211453_emb_BX571966	581486	582838	rfbH	+	0.309911	1	581776	582195
gi_52211453_emb_BX571966	2991302	2992777	rpoN	-	0.0454237	1	2992101	2992168
gi_52211453_emb_BX571966	1903732	1905498	sctC	-	0.168743	1	1905117	1905450
gi_52211453_emb_BX571966	1920833	1921882	sctD	+	0.187798	1	1921675	1921872
gi_52211453_emb_BX571966	2356776	2358551	sdhA	-	0.0490141	1	2357294	2357381
gi_52211453_emb_BX571966	2284474	2285916	selA	-	0.0208044	1	2285464	2285494
gi_52211453_emb_BX571966	2282552	2284477	selB	-	0.0763636	1	2283736	2283883
gi_52211453_emb_BX571966	1869480	1872488	soxA	-	0.00631649	1	1872219	1872238
gi_52211453_emb_BX571966	2135565	2136575	tauA	-	0.293069	1	2136279	2136575
gi_52211453_emb_BX571966	2333256	2334449	trpB	-	0.152557	1	2333366	2333548
gi_52211453_emb_BX571966	1082388	1083590	tyrB1	+	0.0574043	1	1083444	1083513
gi_52211453_emb_BX571966	2492704	2494125	udg2	-	0.100633	1	2492885	2493028

Table S7 List of genes belonging to the three functional categories that were significantly enriched (p-value<0.01 and p-value<0.05) in the ORF-filtered library

Functional category: Inorganic ion transport and metabolism						
locus_ID	strand	gene_coverage	mean_depth	peak_start	peak_end	gene description
BPSL0466	+	1	54,3301	503530	504348	ABC-type metal ion transport system, periplasmic component/surface antigen
BPSL0882	-	0,248963	25,6933	1023539	1023839	Chromate transport protein ChrA
BPSL2351	+	0,189685	16,2189	2843904	2844338	Nitric oxide reductase large subunit
BPSL0824	-	0,008	14	958876	958883	ABC-type metal ion transport system, periplasmic component/surface adhesin
BPSL2368	+	0,359532	13,9442	2863293	2863723	Uncharacterized protein involved in response to NO
BPSL3404	-	0,338836	12,7974	4042163	4042553	Na ⁺ /H ⁺ antiporter NhaD and related arsenite permeases
BPSL0825	-	0,575431	10,5993	959141	959408	Fe ²⁺ /Zn ²⁺ uptake regulation proteins
BPSL2726	-	0,450128	7,8267	3262216	3262568	ABC-type molybdate transport system, periplasmic component
BPSL1001	+	0,131725	6,77465	1164821	1164892	Cu/Zn superoxide dismutase
BPSL1824	-	0,564054	6,74407	2171943	2172533	ABC-type nitrate/sulfonate/bicarbonate transport systems, periplasmic components
BPSL0309	+	0,130448	6,58711	327333	330545	Putative silver efflux pump
BPSL3329	+	0,379699	5,76485	3948556	3948960	Phenylpropionate dioxygenase and related ring-hydroxylating dioxygenases, large terminal subunit
BPSL3007	+	0,400772	5,13487	3584331	3584850	Putative Mg ²⁺ and Co ²⁺ transporter CorB
BPSL0284	+	0,717863	4,07674	297641	298084	Chromate transport protein ChrA
BPSL1770	-	0,206409	4	2089749	2089968	High-affinity nickel permease
BPSL1554	-	0,122418	3,8875	1803765	1804075	Mn ²⁺ and Fe ²⁺ transporters of the NRAMP family
BPSL2849	-	0,443216	3,64399	3411823	3412264	ABC-type phosphate/phosphonate transport system, periplasmic component
BPSL2307	+	0,138281	3,34463	2784060	2784237	Nitrate/nitrite transporter
BPSL1839	-	0,0335707	3	2193983	2194016	ABC-type sulfate transport system, periplasmic component
BPSS0357	+	1	6146,87	499290	499841	Uncharacterized protein probably involved in high-affinity Fe ²⁺ transport
BPSS1178	-	0,212009	197,157	1586902	1587188	Kef-type K ⁺ transport systems, membrane components
BPSS0404	+	0,194891	22,8577	547293	547560	Cytochrome c peroxidase
BPSS0053	-	0,451261	18,4711	52302	52855	Chromate transport protein ChrA
BPSS0704	-	0,582721	12,7871	946636	947270	ABC-type Fe ³⁺ transport system, periplasmic component
BPSS1100	-	0,181058	8,95165	1477157	1478743	Cation transport ATPase
BPSS1005	-	0,519481	3,44531	1326475	1327115	Kef-type K ⁺ transport systems, membrane components
BPSS1204	+	0,243099	3,3315	1626389	1627258	Outer membrane receptor for monomeric catechols
Functional category: Nucleotide transport and metabolism						
locus_ID	strand	gene_coverage	mean_depth	peak_start	peak_end	gene description
BPSL1866	+	0,213035	31,242	2219853	2220072	Dihydroorotate dehydrogenase
BPSL1681	+	0,32491	18,7022	1962097	1962547	Dihydroorotase and related cyclic amidohydrolases
BPSL2896	+	0,208946	6,01223	3465705	3466032	AICAR transformylase/IMP cyclohydrolase PurH (only IMP cyclohydrolase domain in Aful)
BPSL0801	+	0,496656	5,67003	929168	929843	Phosphoribosylaminoimidazole carboxylase (NCAIR synthetase)
BPSL2116	-	0,452122	5,36026	2542885	2543343	Allantoicase
BPSL2928	+	0,0303239	5,18182	3497572	3497616	Adenylosuccinate lyase
BPSL3422	+	0,0792453	4,85714	4065048	4065090	Adenylate cyclase, class 2 (thermophilic)
BPSL1136	-	0,0850144	4,32203	1321632	1322113	Xanthine/uracil permeases
BPSL3167	-	0,0592532	3	3771626	3771699	dGTP triphosphohydrolase
BPSS0479	+	0,0745856	5,39683	649578	649767	Ribonucleotide reductase, alpha subunit
BPSS0045	+	0,0171797	3	45121	45145	Adenylosuccinate lyase

Functional category: Cell envelope biogenesis, outer membrane						
locus_ID	strand	gene_coverage	mean_depth	peak_start	peak_end	gene description
BPSL2559	+	0,341528	63,9126	3087604	3088394	Outer membrane protein (porin)
BPSL2199	-	0,850214	48,4648	2640323	2640919	Cell wall-associated hydrolases (invasion-associated proteins)
BPSL3036	+	0,357759	18,012	3617871	3618286	Outer membrane protein (porin)
BPSL0338	-	0,348607	13,3252	360861	361599	Phospholipase C
BPSL1674	-	0,337273	10,0135	1953804	1954175	Outer membrane protein (porin)
BPSL1029	-	0,108182	9,31933	1199418	1199537	Outer membrane protein (porin)
BPSL3249	+	0,428916	9,2809	3861407	3861763	Outer membrane protein W
BPSL0408	+	0,223782	6,87823	443603	443874	D-alanyl-D-alanine carboxypeptidase
BPSL2152	-	0,179008	6,51807	2582595	2582844	Predicted membrane-associated Zn-dependent proteases 1
BPSL0307	+	0,269024	6,37429	324700	325050	Outer membrane protein
BPSL2297	-	0,134384	6	2765011	2765156	D-alanyl-D-alanine carboxypeptidase
BPSL3161	+	0,573187	5,09547	3765568	3765987	Outer membrane protein W
BPSL2151	-	0,389779	4,95667	2581630	2582530	Outer membrane protein/protective antigen OMA87
BPSL1655	+	0,242397	4,24723	1917834	1918105	Outer membrane protein (porin)
BPSL0308	+	0,189052	4,14478	327039	327336	Membrane-fusion protein
BPSL0442	-	0,257942	4,0936	482402	483709	Periplasmic protease
BPSL2179	-	0,00186916	4	2617410	2617412	Alanine racemase
BPSL0183	-	0,0350163	3,81395	187471	187557	Cell division protein FtsI/penicillin-binding protein 2
BPSL1345	+	0,130644	3,45161	1569365	1569582	Soluble lytic murein transglycosylase and related regulatory proteins
BPSL0725	+	0,0672727	3,13514	834804	834878	L-alanine-DL-glutamate epimerase and related enzymes of enolase superfamily
BPSL0590	-	0,0841674	3	656517	657922	Rhs family protein
BPSS0418	+	0,133936	99,2331	578817	578980	Capsule polysaccharide export protein
BPSS0580	+	0,245344	16,0165	788473	788776	Membrane proteins related to metalloendopeptidases
BPSS1679	+	0,577123	10,8258	2306033	2307187	Outer membrane protein (porin)
BPSS2009	-	0,207485	10,4164	2714780	2715940	Glucosamine 6-phosphate synthetase, contains amidotransferase and phosphosugar isomerase domains
BPSS1287	+	0,149254	8,345	1758557	1759168	Outer membrane protein
BPSS0708	+	0,235441	7,39929	953131	953414	Outer membrane protein (porin)
BPSS0879	+	0,366548	6,54126	1172547	1172959	Outer membrane protein (porin)
BPSS0451	-	0,671875	6,19836	616714	617449	D-alanyl-D-alanine carboxypeptidase
BPSS2064	-	0,0639481	5,49275	2799377	2799446	Outer membrane protein (porin)
BPSS0294	+	0,0254569	5	395439	395478	Outer membrane protein
BPSS1118	+	0,289881	4,8239	1499785	1500263	Membrane-fusion protein
BPSS2165	+	0,355511	4,78771	2928219	2928577	Nucleoside-diphosphate-sugar epimerases

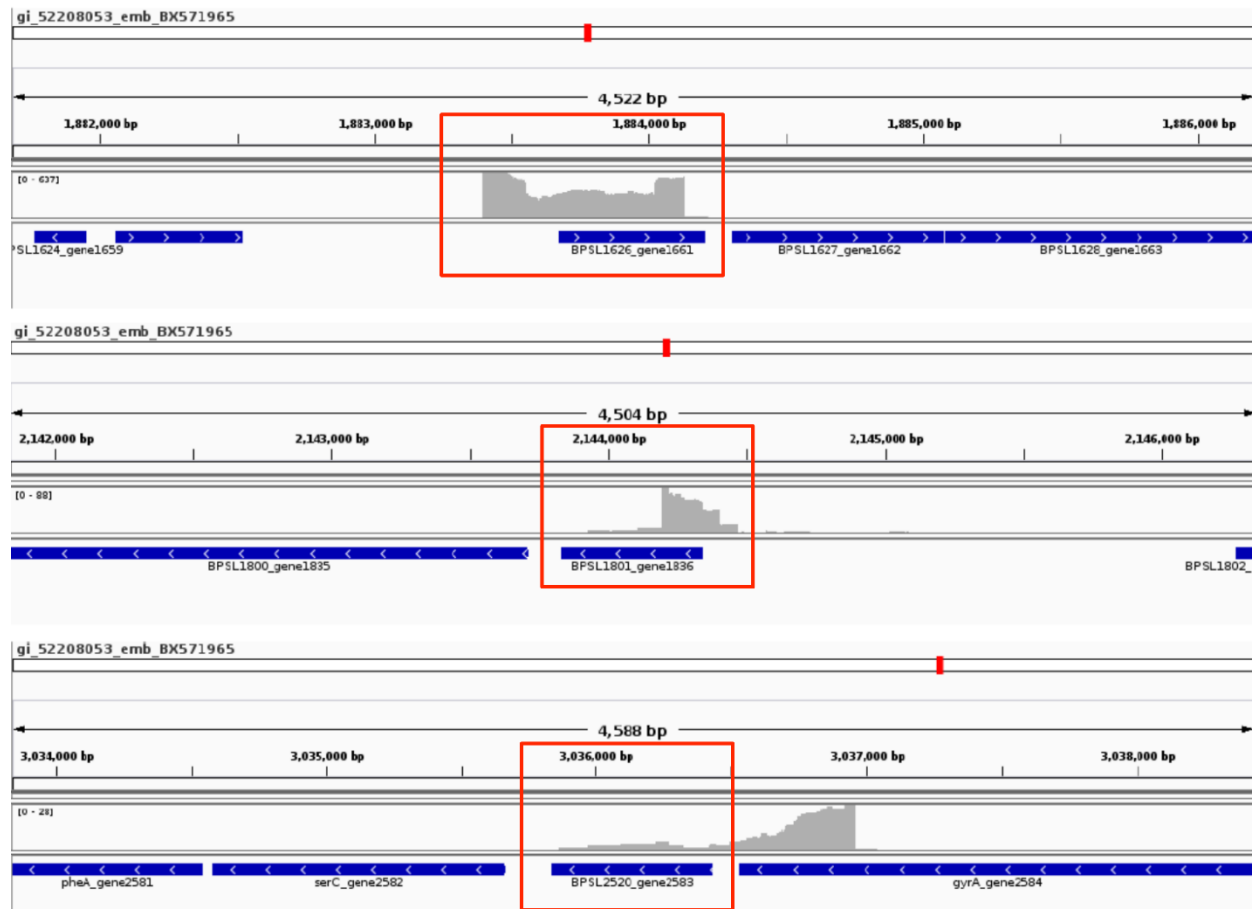


Figure S1 Integrated Genomics Viewer visualization of sequencing reads mapping on the genes of BPSL1626, BPSL1801 and BPSL252