

Name	Size	Aeras_Start	Aeras_End	Source_Start	Source_End	Source	Strand	Product	Functional	Mutation	
BCG_RS01630	2815	1082798	1085612	361468	364283	pasteur	-	PE family protein	Pseudo gene	Frameshift	
BCG_RS01635	2713	1085863	1088575	364533	367246	pasteur	-	PE family protein	Pseudo gene, Partial Stop	Partial in the middle of the contig, miss C-terminus	
BCG_RS01640	2504	1088826	1091329	367496	370000	pasteur	-	PE family protein	Normal gene		
BCG_RS04090	2681	1587723	1590403	869958	872639	pasteur	+	PE family protein	Normal gene		
BCG_RS04560	2732	1673136	1675867	955372	958104	pasteur	+	PE family protein PE_PGRS12, long form	Normal gene		
BCG_RS04735	1223	1712527	1713749	994763	995986	pasteur	-	resuscitation-promoting factor RpfA	Normal gene		
BCG_RS06515	284	2088506	2088789	1370725	1371009	pasteur	+	type VII secretion system ESX-5 protein EsxL	Normal gene		
BCG_RS07840	4199	2373232	2377430	1655450	1659649	pasteur	-	PE family protein	Normal gene		
BCG_RS09255	3080	2704650	2707639	1986774	1989854	pasteur	-	PPE family protein	Normal gene		
BCG_RS10645	12455	3005058	3017512	2278183	2290638	pasteur	-	type I polyketide synthase	Normal gene		
BCG_RS13630	1387	3634927	3636313	2908046	2909433	pasteur	-	PE family protein	Pseudo gene	Frameshift	
BCG_RS14640	545	3813759	3814303	3086878	3087423	pasteur	-	DUF1802 family protein	Normal gene		
BCG_RS17550	4456	101956	106411	3725887	3730343	pasteur	-	PE family protein	Pseudo gene	Frameshift	
BCG_RS17560	9472	107349	116820	3731280	3740752	pasteur	-	PPE family protein	Pseudo gene	Frameshift	
BCG_RS17760	2252	163929	166180	3787860	3790112	pasteur	+	PE family protein	Normal gene		
BCG_RS23160	224	2196086	2196309	1478306	1478530	pasteur	+	hypothetical protein	Normal gene		
BCG_RS23320	5507	2890838	2896344	2163963	2169470	pasteur	-	PPE family protein	Normal gene		
BCG_RS23470	1388	1939822	1941209	1222059	1223447	pasteur	-	PE family protein	Pseudo gene, Partial Stop	Partial in the middle of the contig, miss C-terminus	
BCG_RS07850	2222	2378808	2381029	1661026	1663248	pasteur	-	PE family protein	Normal gene		
BCG_RS12965	4971	3491939	3496912	2765061	2770032	pasteur	-	PE family protein	Pseudo gene	Frameshift	
BCG_RS09390	1094	2753181	2754274	2026306	2027400	pasteur	+	type VII secretion system ESX-5 target PPE25	Normal gene		
BCG_RS10830	2087	3047223	3049309	2320345	2322432	pasteur	+	DUF5631 domain-containing protein	Normal gene		
BCG_RS21965	392	3046841	3047232	2319963	2320355	pasteur	+	hypothetical protein	Normal gene		
BCG_RS22955	164	3046434	3046597	2319559	2319723	pasteur	+	DUF5631 domain-containing protein	Pseudo gene, Partial Start, Partial Stop	Partial in the middle of the contig, miss N-terminus, miss C-terminus	
BCG_RS23585	5432	296206	301637	3919666	3925098	pasteur	+	PE family protein	Normal gene		
BCG_RS03180	3911	1420652	1424562	702887	706798	pasteur	-	PE family protein	Normal gene		
BCG_RS18320	4118	282141	286258	3906066	3910184	pasteur	+	PE family protein	Normal gene		
BCG_RS18350	3227	302469	305695	3925929	3929156	pasteur	+	PE family protein	Normal gene		
BCG_RS22960	391	3046565	3046958	2319690	2320081	pasteur	-	hypothetical protein	Pseudo gene	Frameshift	
FCU26_0291	2750	1082863	1085612	331866	334616	danish	-	PE-PGRS family protein	Normal gene		
FCU26_0292	2699	1085877	1088575	334880	337579	danish	-	PE-PGRS family protein	Normal gene		
FCU26_0293	2504	1088826	1091329	337829	340333	danish	-	PE-PGRS family protein	Normal gene		
FCU26_0599	3911	1420652	1424562	673229	677140	danish	-	PE-PGRS family protein	Normal gene		
FCU26_0776	2681	1587723	1590403	840299	842980	danish	+	PE-PGRS family protein	Normal gene		
FCU26_0870	2732	1673136	1675867	925703	928435	danish	+	PE-PGRS family protein	Normal gene		
FCU26_0904	1223	1712527	1713749	965094	966317	danish	-	putative resuscitation-promoting factor rpfA	Normal gene		
FCU26_1116	2192	1939018	1941209	1191586	1193778	danish	-	PE-PGRS family protein	Normal gene		
FCU26_1251	284	2088506	2088789	1342605	1342889	danish	+	Putative ESAT-6 like protein 4	Normal gene		
FCU26_1509	4199	2373232	2377430	1627280	1631479	danish	-	PE-PGRS family protein	Normal gene		
FCU26_1511	2222	2378808	2381029	1632856	1635078	danish	-	PE-PGRS family protein	Normal gene		
FCU26_1827	1094	2753181	2754274	2007025	2008119	danish	+	PPE family protein	Normal gene		
FCU26_1960	5507	2890838	2896344	2143954	2149461	danish	-	PE-PGRS family protein	Normal gene		
FCU26_2074	12455	3005058	3017512	2258174	2270629	danish	-	putative polyketide synthase pks12	Normal gene		
FCU26_2529	3455	3491939	3495393	2745160	2748615	danish	-	PE-PGRS family protein	Normal gene		
FCU26_2530	1427	3495486	3496912	2748707	2750134	danish	-	PE-PGRS family protein	Normal gene		
FCU26_2663	1169	3634927	3636095	2888148	2889317	danish	-	PE-PGRS family protein	Normal gene		
FCU26_2869	944	3812637	3813580	3065703	3066647	danish	-	Hypothetical protein	Normal gene		
FCU26_2870	647	3813759	3814405	3066625	3067472	danish	-	hypothetical protein	Normal gene		
FCU26_3487	5630	100782	106411	3746958	3752588	danish	-	PE-PGRS family protein PE_PGRS50	Normal gene		
FCU26_3490	6290	110531	116820	3756707	3762997	danish	-	PE Family protein	Normal gene		
FCU26_3530	2252	163929	166180	3810105	3812357	danish	+	PE-PGRS family protein	Normal gene		
FCU26_3645	4118	282141	286258	3928317	3932435	danish	+	PE-PGRS family protein	Normal gene		
FCU26_3646	6749	286550	293298	3932726	3939475	danish	+	PE-PGRS family protein	Normal gene		
FCU26_3649	5432	296206	301637	3942382	3947814	danish	+	PE-PGRS family protein	Normal gene		
FCU26_3650	656	301767	302422	3947943	3948599	danish	-	putative fatty-acid-CoA ligase fadD18	Normal gene		
FCU26_3651	3227	302469	305695	3948645	3951872	danish	+	PE-PGRS family protein	Normal gene		
FCU26_3749	653	408401	409053	4054580	4055233	danish	+	putative arginine and proline rich protein	Normal gene		
FCU26_2108	2087	3047223	3049309	2300330	2302417	danish	+	hypothetical protein	Normal gene		
FCU26_2107	605	3046405	3047018	2299521	2300126	danish	-	putative transmembrane protein	Normal gene		