

Additional file 1***M. ulcerans* PE, PGRS and PPE genes****PE genes**

<i>M. ulcerans</i> gene number	<i>M. ulcerans</i> gene name	<i>M. tuberculosis</i> orthologue gene number	<i>M. tuberculosis</i> orthologue gene name
MUL_0590 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0946*	PE31	Rv1195	PE13
MUL_0967	-	<i>M. ulcerans</i> -specific	-
MUL_1019	-	Rv1172c	PE12
MUL_1033 (pseudogene)	-	Rv0159c	PE3
MUL_1034	PE4	Rv0160c	PE4
MUL_1207	PE5	Rv0285	PE5
MUL_1632		Rv1646	PE17
MUL_1822 (pseudogene)	PE16	Rv1430	PE16
MUL_2246	-	<i>M. ulcerans</i> -specific	-
MUL_2395	PE26	<i>M. ulcerans</i> -specific	-
MUL_2589 (pseudogene)		<i>M. ulcerans</i> -specific	-
MUL_3084	PE19	Rv1791	PE19
MUL_3088	PE19_1	Rv1788	PE18
MUL_3845 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4196	PE32	Rv3622c	PE32
MUL_4336	PE5_1	<i>M. ulcerans</i> -specific	-
MUL_4359	PE34	Rv3746c	PE34
MUL_4462	-	Rv0916c	PE7
MUL_4620	PE8	Rv1040c	PE8
MUL_4726 (pseudogene)	-	<i>M. ulcerans</i> -specific	-

PE_PGRS genes

<i>M. ulcerans</i> gene number	<i>M. ulcerans</i> gene name	<i>M. tuberculosis</i> orthologue gene number	<i>M. tuberculosis</i> orthologue gene name
MUL_0085 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0088 (pseudogene)	PE_PGRS50	<i>M. ulcerans</i> -specific	-
MUL_0190	PE_PGRS20	Rv1091	PE_PGRS22
MUL_0212	PE_PGRS9_3	Rv1068c	PE_PGRS20
MUL_0213 (pseudogene)	-	Rv1067c	PE_PGRS19
MUL_0222 (pseudogene)	-	<i>M. ulcerans</i> -specific	-

MUL_0355	-	<i>M. ulcerans</i> -specific	-
MUL_0391	-	<i>M. ulcerans</i> -specific	-
MUL_0466 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0537 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0569	-	<i>M. ulcerans</i> -specific	-
MUL_0570	-	<i>M. ulcerans</i> -specific	-
MUL_0572	-	<i>M. ulcerans</i> -specific	-
MUL_0694 (pseudogene)	-	Rv0578c	PE_PGRS7
MUL_0740	-	<i>M. ulcerans</i> -specific	-
MUL_0748	-	<i>M. ulcerans</i> -specific	-
MUL_0973 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0978 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1013 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1014 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1015 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1021	-	<i>M. ulcerans</i> -specific	-
MUL_1081 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1128 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1145	PE_PGRS30	<i>M. ulcerans</i> -specific	-
MUL_1149	-	<i>M. ulcerans</i> -specific	-
MUL_1155	-	<i>M. ulcerans</i> -specific	-
MUL_1326 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1339	-	<i>M. ulcerans</i> -specific	-
MUL_1363	-	<i>M. ulcerans</i> -specific	-
MUL_1387 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1448 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1450	-	<i>M. ulcerans</i> -specific	-
MUL_1453 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1637 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1639	-	Rv1651c	PE_PGRS30
MUL_1640	-	<i>M. ulcerans</i> -specific	-
MUL_1641 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1663 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1672 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1675 (pseudogene)	-	<i>M. ulcerans</i> -specific	-

MUL_1717 (pseudogene)	PE_PGRS44	Rv2591	PE_PGRS44
MUL_1718	-	<i>M. ulcerans</i> -specific	-
MUL_1721	-	<i>M. ulcerans</i> -specific	-
MUL_1837	-	<i>M. ulcerans</i> -specific	-
MUL_1838	-	Rv1441c	PE_PGRS26
MUL_1868 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1870	-	Rv1468c	PE_PGRS29
MUL_2099 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2172 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2207 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2250	-	<i>M. ulcerans</i> -specific	-
MUL_2354	-	<i>M. ulcerans</i> -specific	-
MUL_2485	PE_PGRS9	<i>M. ulcerans</i> -specific	-
MUL_2590 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2684 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2702	-	<i>M. ulcerans</i> -specific	-
MUL_2783	PE_PGRS39	<i>M. ulcerans</i> -specific	-
MUL_2853	PE_PGRS51	Rv3367	PE_PGRS51
MUL_3051 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3056	PE_PGRS34	Rv1840c	PE_PGRS34
MUL_3062	PE_PGRS9_1	Rv1818c	PE_PGRS33
MUL_3100 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3120 (pseudogene)	-	Rv1768	PE_PGRS31
MUL_3130 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3164 (pseudogene)	PE_PGRS26	<i>M. ulcerans</i> -specific	-
MUL_3186	-	<i>M. ulcerans</i> -specific	-
MUL_3209 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3242 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3244 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3247	PE_PGRS33	<i>M. ulcerans</i> -specific	-
MUL_3278	PE_PGRS46	Rv2634c	PE_PGRS46
MUL_3292	-	<i>M. ulcerans</i> -specific	-
MUL_3318	-	<i>M. ulcerans</i> -specific	-
MUL_3342 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3436 (pseudogene)	-	<i>M. ulcerans</i> -specific	-

MUL_3439 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3485 (pseudogene)	PE_PGRS63	<i>M. ulcerans</i> -specific	-
MUL_3507	-	Rv2162c	PE_PGRS38
MUL_3671	PE_PGRS2	<i>M. ulcerans</i> -specific	-
MUL_3672	PE_PGRS25	<i>M. ulcerans</i> -specific	-
MUL_3704	PE_PGRS33_1	<i>M. ulcerans</i> -specific	-
MUL_3710 (pseudogene)	PE_PGRS7	<i>M. ulcerans</i> -specific	-
MUL_3741	PE_PGRS59	<i>M. ulcerans</i> -specific	-
MUL_3851 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3975	-	<i>M. ulcerans</i> -specific	-
MUL_3982	-	<i>M. ulcerans</i> -specific	-
MUL_3990	-	<i>M. ulcerans</i> -specific	-
MUL_4012 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4070 (pseudogene)	PE_PGRS53	Rv3507 or 8	PE_PGRS53 or 54
MUL_4086	-	<i>M. ulcerans</i> -specific	-
MUL_4087 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4112 (pseudogene)	PE_PGRS27	<i>M. ulcerans</i> -specific	-
MUL_4118 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4175 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4177 (pseudogene)	-	Rv3595c	PE_PGRS59
MUL_4212 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4280	PE_PGRS9_2	<i>M. ulcerans</i> -specific	-
MUL_4294 (pseudogene)	PE_PGRS56	<i>M. ulcerans</i> -specific	-
MUL_4367	-	<i>M. ulcerans</i> -specific	-
MUL_4381	-	<i>M. ulcerans</i> -specific	-
MUL_4382 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4399	-	<i>M. ulcerans</i> -specific	-
MUL_4400	-	<i>M. ulcerans</i> -specific	-
MUL_4419	-	<i>M. ulcerans</i> -specific	-
MUL_4420 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4421 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4431	-	<i>M. ulcerans</i> -specific	-
MUL_4452 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4489	-	<i>M. ulcerans</i> -specific	-
MUL_4524	-	<i>M. ulcerans</i> -specific	-

MUL_4525 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4549 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4581	-	<i>M. ulcerans</i> -specific	-
MUL_4647 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4718 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4823 (pseudogene)	PE_PGRS1	Rv0109	PE_PGRS1
MUL_4871 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4909 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4913 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4981 (pseudogene)	-	<i>M. ulcerans</i> -specific	-

PPE genes

<i>M. ulcerans</i> gene number	<i>M. ulcerans</i> gene name	<i>M. tuberculosis</i> orthologue gene number	<i>M. tuberculosis</i> orthologue gene name
MUL_0098	PPE62	<i>M. ulcerans</i> -specific	-
MUL_0134 (pseudogene)	PPE49	<i>M. ulcerans</i> -specific	-
MUL_0162 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0399	-	<i>M. ulcerans</i> -specific	-
MUL_0492	-	<i>M. ulcerans</i> -specific	-
MUL_0597 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0684 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0779 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0782	-	<i>M. ulcerans</i> -specific	-
MUL_0786 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0852 (pseudogene)	-	Rv1706c	PPE23
MUL_0890	-	<i>M. ulcerans</i> -specific	-
MUL_0892 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_0893	-	<i>M. ulcerans</i> -specific	-
MUL_0902	-	<i>M. ulcerans</i> -specific	-
MUL_0947	PPE18	Rv1196	PPE18
MUL_0964	-	<i>M. ulcerans</i> -specific	-
MUL_0965	-	<i>M. ulcerans</i> -specific	-
MUL_1154	-	<i>M. ulcerans</i> -specific	-
MUL_1202	PPE3	Rv0280	PPE3
MUL_1208	PPE4	Rv0286	PPE4
MUL_1395	PPE10	Rv0442c	PPE10

MUL_1470 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_1701	-	<i>M. ulcerans</i> -specific	-
MUL_1702	PPE23	<i>M. ulcerans</i> -specific	-
MUL_1875 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2094	-	<i>M. ulcerans</i> -specific	-
MUL_2096	-	<i>M. ulcerans</i> -specific	-
MUL_2098 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2129	-	<i>M. ulcerans</i> -specific	-
MUL_2167	PPE44	Rv2770c	PPE44
MUL_2169 (pseudogene)	PPE43	Rv2768c	PPE43
MUL_2203 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2245	-	<i>M. ulcerans</i> -specific	-
MUL_2247	-	<i>M. ulcerans</i> -specific	-
MUL_2248 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_2355 (pseudogene)	PPE37	Rv2123	PPE37
MUL_2427	-	Rv3135	PPE50
MUL_2428	PPE51	Rv3136	PPE51
MUL_2440	PPE28	<i>M. ulcerans</i> -specific	-
MUL_2456 (pseudogene)	PPE52	Rv3144c	PPE52
MUL_2473 (pseudogene)	PPE53	Rv3159c	PPE53
MUL_2584 (pseudogene)	PPE21	<i>M. ulcerans</i> -specific	-
MUL_2586	-	<i>M. ulcerans</i> -specific	-
MUL_2655 (pseudogene)	PPE14	<i>M. ulcerans</i> -specific	-
MUL_2686	-	<i>M. ulcerans</i> -specific	-
MUL_2690	-	<i>M. ulcerans</i> -specific	-
MUL_2718	PPE61	<i>M. ulcerans</i> -specific	-
MUL_2737	PPE51_1	<i>M. ulcerans</i> -specific	-
MUL_2777 (pseudogene)	PPE5	<i>M. ulcerans</i> -specific	-
MUL_2932	-	<i>M. ulcerans</i> -specific	-
MUL_2944 (pseudogene)	PPE35	Rv1918c	PPE35
MUL_3071	PPE30	Rv1802	PPE30
MUL_3072	PPE32	Rv1808	PPE32
MUL_3074	PPE31	Rv1807	PPE31
MUL_3075 (pseudogene)	-	Rv1809	PPE33
MUL_3076	PPE31_1	<i>M. ulcerans</i> -specific	-

MUL_3087	PPE26	Rv1789	PPE26
MUL_3089	PPE25	Rv1787	PPE25
MUL_3127	-	<i>M. ulcerans</i> -specific	-
MUL_3169	PPE8	<i>M. ulcerans</i> -specific	-
MUL_3397 (pseudogene)	PPE6	<i>M. ulcerans</i> -specific	-
MUL_3482 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_3608 (pseudogene)	-	Rv2356c	PPE40
MUL_3850 (pseudogene)	PPE2	<i>M. ulcerans</i> -specific	-
MUL_4121 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4123 (pseudogene)	-	Rv3558	PPE64
MUL_4195	PPE65	Rv3621c	PPE65
MUL_4337 (pseudogene)	PPE46	<i>M. ulcerans</i> -specific	-
MUL_4411 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4456	-	<i>M. ulcerans</i> -specific	-
MUL_4463	-	Rv0915c	PPE14
MUL_4491	-	<i>M. ulcerans</i> -specific	-
MUL_4521 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4530 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4532 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4621	PPE15	Rv1039c	PPE15
MUL_4672	-	<i>M. ulcerans</i> -specific	-
MUL_4724 (pseudogene)	-	<i>M. ulcerans</i> -specific	-
MUL_4853	PPE1	Rv0096	PPE1
MUL_5078	-	Rv1705c	PPE22

* MUL_0946 has been annotated as a PPE in the BuruList database (<http://genolist.pasteur.fr/BuruList>), given the name PE31 (in contradiction to its annotation as a PPE), but is actually the orthologue of the PE gene Rv1195 (PE13).