

**Table S2. Comparison of *M. tuberculosis* H37Rv succinylome with other succinylomes. BLAST alignments were performed by using two-directional BlastP software with BLOSUM62 matrix; the best-scoring homologous protein was selected if the corresponding BLAST E values were lower than 1E-5.**

<i>M. tuberculosis</i> H37Rv	Synonym	Description	Prokaryote		Eukaryote			
			<i>Escherichia coli</i> BW25113	<i>Escherichia coli</i> DH10B	<i>Saccharomyces cerevisiae</i>	<i>Homo sapiens</i>	<i>Mus musculus</i>	<i>Drosophila melanogaster</i>
gi 15607151	Rv0009	Probable iron-regulated peptidyl-prolyl cis-trans isomerase A PpiA (PPIase A) (rotamase A)	sp P23869 PPIB_ECOLI	gi 170080108	Not found	sp P23284 PPIB_HUMAN	tr Q9DCY1 Q9DCY1_MOUSE	Not found
gi 15607195	Rv0053	30S ribosomal protein S6 RpsF	sp P02358 RS6_ECOLI	gi 170083646	Not found	Not found	Not found	Not found
gi 15607196	Rv0054	Single-strand binding protein Ssb (helix-destabilizing protein)	Not found	gi 170083515	Not found	Not found	Not found	Not found
gi 15607261	Rv0119	Probable fatty-acid-CoA ligase FadD7 (fatty-acid-CoA synthetase) (fatty-acid-CoA synthase)	Not found	Not found	YBR222C	Not found	Not found	Not found
gi 15607330	Rv0189c	Probable dihydroxy-acid dehydratase llvD (dad)	sp P05791 LLVD_ECOLI	Not found	YJR016C	Not found	Not found	Not found
gi 15607364	Rv0223c	Probable aldehyde dehydrogenase	sp P25553 ALDA_ECOLI	gi 170079935	YER073W	Not found	Not found	Not found
gi 15607388	Rv0247c	Probable succinate dehydrogenase [iron-sulfur subunit] (succinic dehydrogenase)	sp P0AC47 FRDB_ECOLI	Not found	Not found	sp P21912 DHSB_HUMAN	sp Q9CQA3 DHSB_MOUSE	Not found
gi 15607475	Rv0334	Alpha-D-glucose-1-phosphate thymidyltransferase RmlA (dTDP-glucose synthase) (dTDP-glucose pyrophosphorylase)	sp P37744 RMLA1_ECOLI	gi 170081669	Not found	Not found	Not found	Not found
gi 15607491	Rv0350	Probable chaperone protein DnaK (heat shock protein 70) (heat shock 70 kDa protein) (HSP70)	Not found	Not found	YJR045C	Not found	Not found	Not found
gi 15607498	Rv0357c	Probable adenylosuccinate synthetase PurA (imp--aspartate ligase) (ADSS) (ampsase)	sp P0A7D4 PURA_ECOLI	gi 170083623	Not found	Not found	Not found	Not found
gi 15607504	Rv0363c	Probable fructose-bisphosphate aldolase Fba	sp P0AB71 ALF_ECOLI	gi 170082482	YKL060C	Not found	Not found	Not found
gi 15607541	Rv0400c	Acyl-CoA dehydrogenase FadE7	Not found	Not found	Not found	Not found	sp Q60759 GCDH_MOUSE	Not found
gi 15607549	Rv0408	Probable phosphate acetyltransferase Pta (phosphotransacetylase)	sp P0A9M8 PTA_ECOLI	gi 170081913	Not found	Not found	Not found	Not found
gi 15607563	Rv0422c	Probable phosphomethylpyrimidine kinase ThiD (HMP-phosphate kinase) (HMP-P kinase)	Not found	gi 170082027	Not found	Not found	Not found	Not found
gi 15607564	Rv0423c	Probable thiamine biosynthesis protein ThiC	sp P30136 THIC_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15607573	Rv0432	Periplasmic superoxide dismutase [Cu-Zn] SodC	Not found	Not found	Not found	sp P00441 SODC_HUMAN	sp P08228 SODC_MOUSE	Not found
gi 15607581	Rv0440	60 kDa chaperonin 2 GroEL2 (protein CPN60-2) (GroEL protein 2) (65 kDa antigen) (heat shock protein 65) (cell wall protein A) (antigen A)	sp P0A6F5 CH60_ECOLI	gi 170083592	YLR259C	sp P10809 CH60_HUMAN	sp P63038 CH60_MOUSE	Not found
gi 15607603	Rv0462	Dihydrolipoamide dehydrogenase LpdC (lipoamide reductase (NADH)) (lipoyl dehydrogenase) (dihydrolipoyl dehydrogenase) (diaphorase)	sp P0A9P0 DLDH_ECOLI	gi 170079753	YFL018C	Not found	sp O08749 DLDH_MOUSE	tr Q9VVL7 Q9VVL7_DROME
gi 15607609	Rv0468	(BHBD)	Not found	Not found	Not found	Not found	sp Q61425 HCDH_MOUSE	Not found
gi 15607651	Rv0510	Probable porphobilinogen deaminase HemC (PBG) (hydroxymethylbilane synthase) (HMBS) (pre-uroporphyrinogen synthase)	sp P06983 HEM3_ECOLI	gi 170083288	Not found	Not found	Not found	Not found
gi 15607688	Rv0548c	Naphthoate synthase MenB (dihydroxynaphthoic acid synthetase) (DHNA synthetase)	sp P0ABU0 MENB_ECOLI	gi 170081881	Not found	Not found	Not found	Not found
gi 15607706	Rv0566c	hypothetical protein	sp P0A8E7 YAJQ_ECOLI	gi 170080012	Not found	Not found	Not found	Not found
gi 15607780	Rv0640	50S ribosomal protein L11 RplK	sp P0A7J7 RL11_ECOLI	gi 170083443	Not found	Not found	Not found	Not found
gi 15607784	Rv0644c	Methoxy mycolic acid synthase 2 MmaA2 (methyl mycolic acid synthase 2) (MMA2) (hydroxy mycolic acid synthase)	sp P0A9H7 CFA_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15607807	Rv0667	DNA-directed RNA polymerase (beta chain) RpoB (transcriptase beta chain) (RNA polymerase beta subunit)	sp P0A8V2 RPOB_ECOLI	gi 170083447	Not found	Not found	Not found	Not found
gi 15607808	Rv0668	DNA-directed RNA polymerase (beta' chain) RpoC (transcriptase beta' chain) (RNA polymerase beta' subunit)	sp P0A8T7 RPOC_ECOLI	gi 170083448	YDL140C	Not found	Not found	Not found
gi 15607823	Rv0683	30S ribosomal protein S7 RpsG	sp P02359 RS7_ECOLI	gi 170082859	Not found	sp Q9Y2R9 RT07_HUMAN	Not found	Not found
gi 15607825	Rv0685	Probable iron-regulated elongation factor TU Tuf (EF-TU)	Not found	Not found	Not found	sp P49411 EFTU_HUMAN	Not found	Not found
gi 15607840	Rv0700	30S ribosomal protein S10 RpsJ (transcription antitermination factor NusE)	sp P0A7R5 RS10_ECOLI	gi 170082840	Not found	Not found	Not found	Not found
gi 15607841	Rv0701	50S ribosomal protein L3 RplC	sp P60438 RL3_ECOLI	gi 170082839	Not found	Not found	Not found	Not found
gi 15607842	Rv0702	50S ribosomal protein L4 RplD	sp P60723 RL4_ECOLI	gi 170082838	Not found	Not found	Not found	Not found
gi 15607846	Rv0706	50S ribosomal protein L22 RplV	sp P61175 RL22_ECOLI	gi 170082834	Not found	Not found	Not found	Not found
gi 15607847	Rv0707	30S ribosomal protein S3 RpsC	sp P0A7V3 RS3_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15607854	Rv0714	50S ribosomal protein L14 RplN	sp P0ADY3 RL14_ECOLI	gi 170082830	Not found	Not found	Not found	sp P48159 RL23_DROME
gi 15607855	Rv0715	50S ribosomal protein L24 RplX	sp P60624 RL24_ECOLI	gi 170082829	Not found	Not found	sp Q9CQ06 RM24_MOUSE	Not found
gi 15607856	Rv0716	50S ribosomal protein L5 RplE	sp P62399 RL5_ECOLI	gi 170082828	YPR102C	Not found	Not found	Not found
gi 15607858	Rv0718	30S ribosomal protein S8 RpsH	sp P0A7W7 RS8_ECOLI	gi 170082826	YJL190C	Not found	Not found	Not found
gi 15607859	Rv0719	50S ribosomal protein L6 RplF	Not found	Not found	YNL067W	Not found	Not found	Not found
gi 15607862	Rv0722	50S ribosomal protein L30 RplM	sp P0AG51 RL30_ECOLI	gi 170082822	Not found	Not found	Not found	Not found
gi 15607873	Rv0733	Adenylate kinase Adk (ATP-AMP transphosphorylase)	sp P69441 KAD_ECOLI	gi 170080059	YDR226W	Not found	sp Q9WTP7 KAD3_MOUSE	Not found
gi 15607893	Rv0753c	Probable methylmalonate-semialdehyde dehydrogenase MmsA (methylmalonic acid semialdehyde dehydrogenase) (MMSDH)	Not found	Not found	Not found	sp Q02252 MMSA_HUMAN	sp Q9EQ20 MMSA_MOUSE	Not found
gi 15607913	Rv0773c	Probable bifunctional acylase GgtA: cephalosporin acylase (GL-7ACA acylase) + gamma-glutamyltranspeptidase (GGT)	sp P18956 GGT_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15607961	Rv0821c	Probable phosphate-transport system transcriptional regulatory protein PhoY2	sp P0A9K7 PHOU_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15607998	Rv0858c	Probable N-succinyl-diaminopimelate aminotransferase DapC (DAP-at)	sp P77806 YBDL_ECOLI	Not found	Not found	Not found	sp Q8BGT5 ALAT2_MOUSE	Not found
gi 15608000	Rv0860	Probable fatty oxidation protein FadB	sp P77399 FADJ_ECOLI	Not found	Not found	Not found	Not found	tr Q8IPE8 Q8IPE8_DROME
gi 15608013	Rv0873	Probable acyl-CoA dehydrogenase FadE10	Not found	Not found	Not found	Not found	sp Q8JZN5 ACAD9_MOUSE	tr A1ZBJ2 A1ZBJ2_DROME
gi 15608036	Rv0896	Probable citrate synthase I GltA2	sp P0ABH7 CISY_ECOLI	gi 170080387	YNR001C	Not found	sp Q9CZU6 CISY_MOUSE	Not found
gi 15608086	Rv0946c	Probable glucose-6-phosphate isomerase Pgi (GPI) (phosphoglucose isomerase) (phosphohexose isomerase) (phi)	sp P0A6T1 G6PI_ECOLI	gi 170083482	YBR196C	sp P06744 G6PI_HUMAN	sp P06745 G6PI_MOUSE	Not found
gi 15608097	Rv0957	Probable bifunctional purine biosynthesis protein PurH: phosphoribosylaminoimidazolecarboxamide formyltransferase (AICAR transformylase) (5'-phosphoribosyl-5-aminoimidazole-4-carboxamide formyltransferase) + inosinemonophosphate cyclodiolase (imp cyclodiolase) (inosinase) (imp synthetase) (ATIC)	sp P15639 PUR9_ECOLI	gi 170083467	Not found	Not found	Not found	Not found
gi 15608154	Rv1014c	Probable peptidyl-tRNA hydrolase Pth	sp P0A7D1 PTH_ECOLI	gi 170080832	Not found	Not found	Not found	Not found
gi 15608157	Rv1017c	Probable ribose-phosphate pyrophosphokinase PrsA (phosphoribosyl pyrophosphate synthetase) (PRPP synthetase)	sp P0A717 KPRS_ECOLI	gi 170080835	YHL011C	Not found	Not found	Not found
gi 15608158	Rv1018c	Probable UDP-N-acetylglucosamine pyrophosphorylase GlmU	sp P0ACC7 GLMU_ECOLI	gi 170083231	Not found	Not found	Not found	Not found
gi 15608163	Rv1023	Probable enolase Eno	sp P0A6P9 ENO_ECOLI	gi 170082351	YGR254W	sp P06733 ENOA_HUMAN	Not found	Not found
gi 15608210	Rv1070c	(crotonase)	Not found	Not found	Not found	Not found	sp Q8BH95 ECHM_MOUSE	Not found
gi 15608211	Rv1071c	(crotonase)	Not found	Not found	Not found	Not found	sp Q8QZS1 HIBCH_MOUSE	Not found
gi 15608219	Rv1079	Cystathionine gamma-synthase MetB (CGS) (O-succinylhomoserine [thiol]-lyase)	sp P00935 METB_ECOLI	gi 170083409	YAL012W	Not found	Not found	Not found
gi 15608238	Rv1098c	Probable fumarase Fum (fumarate hydratase)	Not found	Not found	YPL262W	Not found	Not found	Not found
gi 15608262	Rv1122	Probable 6-phosphogluconate dehydrogenase, decarboxylating Gnd2	sp P00350 PGD_ECOLI	gi 170081660	YHR183W	sp P31937 3HIDH_HUMAN	sp Q9DCD0 6PGD_MOUSE	Not found
gi 15608385	Rv1245c	Probable short-chain type dehydrogenase/reductase	Not found	Not found	Not found	Not found	sp Q9EQ06 DHB11_MOUSE	Not found

gi 15608416	Rv1276c	hypothetical protein	sp P76502 SIXA_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608432	Rv1292	Probable arginyl-tRNA synthetase ArgS (ARGRS) (arginine--tRNA ligase)	Not found	Not found	YDR341C	Not found	Not found	Not found
gi 15608437	Rv1297	Probable transcription termination factor Rho homolog	sp P0AG30 RHO_ECOLI	gi 170083270	Not found	Not found	Not found	Not found
gi 15608448	Rv1308	Probable ATP synthase alpha chain AtpA	Not found	Not found	Not found	Not found	sp Q03265 ATPA_MOUSE	sp P35381 ATPA_DROME
gi 15608455	Rv1315	Probable UDP-N-acetylglucosamine 1-carboxyvinyltransferase MurA	sp P0A749 MURA_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608468	Rv1328	Probable glycogen phosphorylase GlgP	sp P0AC86 PHSG_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608523	Rv1383	Probable carbamoyl-phosphate synthase small chain CarA (carbamoyl-phosphate synthetase glutamine chain)	sp P0A6F1 CARA_ECOLI	gi 170079695	Not found	Not found	Not found	Not found
gi 15608531	Rv1392	Probable S-adenosylmethionine synthetase MetK (mat) (AdoMet synthetase) (methionine adenosyltransferase)	sp P0A817 METK_ECOLI	gi 170082496	YDR502C	Not found	sp Q91X83 METK1_MOUSE	Not found
gi 15608542	Rv1404	Probable transcriptional regulatory protein	sp P27245 MARR_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608574	Rv1436	Probable glyceraldehyde 3-phosphate dehydrogenase Gap (GAPDH)	sp P0A9B2 G3P1_ECOLI	gi 170081435	YGR192C	sp P04406 G3P_HUMAN	Not found	Not found
gi 15608576	Rv1438	Probable triosephosphate isomerase Tpi (TIM)	Not found	Not found	YDR050C	Not found	sp P17751 TPIS_MOUSE	Not found
gi 15608586	Rv1448c	Probable transaldolase Tal	sp P0A867 TALA_ECOLI	gi 170079671	YLR354C	Not found	sp Q93092 TALDO_MOUSE	Not found
gi 15608587	Rv1449c	Transketolase Tkt (TK)	sp P33570 TKT2_ECOLI	gi 170082489	Not found	Not found	Not found	Not found
gi 15608613	Rv1475c	Probable iron-regulated aconitate hydratase Acn (citrate hydro-lyase) (aconitase)	sp P25516 ACON1_ECOLI	gi 170080955	YLR304C	Not found	sp Q99KI0 ACON_MOUSE	Not found
gi 15608621	Rv1483	3-oxoacyl-[acyl-carrier protein] reductase FabG1 (3-ketoacyl-acyl carrier protein reductase) (mycolic acid biosynthesis a protein)	sp P0AEK2 FABG_ECOLI	gi 170080744	Not found	Not found	Not found	Not found
gi 15608622	Rv1484	reductase)	sp P0AEK4 FABI_ECOLI	gi 170080967	Not found	Not found	Not found	Not found
gi 15608626	Rv1488	Possible exported conserved protein	sp P0ABC7 HFLK_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608682	Rv1544	Possible ketoacyl reductase	sp P39831 YDFG_ECOLI	gi 170081206	Not found	Not found	sp O70503 DHB12_MOUSE	Not found
gi 15608741	Rv1603	Probable phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase HisA	Not found	gi 170081656	Not found	Not found	Not found	Not found
gi 15608755	Rv1617	Probable pyruvate kinase PykA	sp P0AD61 KPYK1_ECOLI	gi 170081336	YAL038W	Not found	Not found	Not found
gi 15608767	Rv1629	Probable DNA polymerase I PolA	sp P00582 DPO1_ECOLI	gi 170083336	Not found	Not found	Not found	Not found
gi 15608779	Rv1641	Probable initiation factor if-3 InfC	sp P0A707 IF3_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608788	Rv1650	Probable phenylalanyl-tRNA synthetase, beta chain PheT	Not found	Not found	Not found	Not found	sp Q9WUA2 SYFB_MOUSE	Not found
gi 15608792	Rv1654	Probable acetylglutamate kinase ArgB	Not found	Not found	YER069W	Not found	Not found	Not found
gi 15608793	Rv1655	Probable acetylornithine aminotransferase ArgD	sp P18335 ARGD_ECOLI	Not found	Not found	Not found	sp P29758 OAT_MOUSE	Not found
gi 15608794	Rv1656	Probable ornithine carbamoyltransferase, anabolic ArgF	sp P04391 OTC1_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15608837	Rv1699	Probable CTP synthase PyrG	sp P0A7E5 PYRG_ECOLI	gi 170082352	Not found	Not found	Not found	Not found
gi 15608980	Rv1843c	(IMPD)	sp P0ADG7 IMDH_ECOLI	gi 170082118	YLR432W	Not found	Not found	Not found
gi 15609006	Rv1869c	Probable reductase	Not found	gi 170082883	Not found	Not found	Not found	Not found
gi 15609009	Rv1872c	Possible L-lactate dehydrogenase (cytochrome) LldD2	Not found	Not found	Not found	Not found	sp Q9WU19 HAOX1_MOUSE	Not found
gi 15609013	Rv1876	Probable bacterioferritin BfrA	sp P0ABD3 BFR_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15609045	Rv1908c	Catalase-peroxidase-peroxynitritase T KatG	sp P13029 KATG_ECOLI	gi 170083412	Not found	Not found	Not found	Not found
gi 15609065	Rv1928c	Probable short-chain type dehydrogenase/reductase	Not found	Not found	Not found	Not found	sp Q9WV68 DECR2_MOUSE	Not found
gi 15609069	Rv1932	Probable thiol peroxidase Tpx	sp P0A862 TPX_ECOLI	gi 170081002	Not found	Not found	Not found	Not found
gi 15609166	Rv2029c	6-phosphofructokinase PfkB (phosphohexokinase) (phosphofructokinase)	Not found	gi 170081380	Not found	Not found	Not found	Not found
gi 15609258	Rv2121c	ATP phosphoribosyltransferase HisG	sp P60757 HIS1_ECOLI	gi 170081650	Not found	Not found	Not found	Not found
gi 15609324	Rv2187	synthase)	Not found	Not found	YOR317W	Not found	sp Q8JZR0 ACSL5_MOUSE	Not found
gi 15609352	Rv2215	DlaT, dihydrolipoamide acyltransferase, E2 component of pyruvate dehydrogenase	Not found	Not found	YDR148C	Not found	Not found	Not found
gi 15609357	Rv2220	Glutamine synthetase GlnA1 (glutamine synthase) (GS-I)	sp P0A9C5 GLNA_ECOLI	gi 170083342	Not found	Not found	Not found	Not found
gi 15609359	Rv2222c	Probable glutamine synthetase GlnA2 (glutamine synthase) (GS-II)	Not found	Not found	YPR035W	Not found	sp P15105 GLNA_MOUSE	Not found
gi 15609382	Rv2245	3-oxoacyl-[acyl-carrier protein] synthase 1 KasA (beta-ketoacyl-ACP synthase) (KAS I)	sp P0A953 FABB_ECOLI	gi 170080746	Not found	Not found	Not found	Not found
gi 15609417	Rv2280	Probable dehydrogenase	sp P77748 YDIJ_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15609435	Rv2298	hypothetical protein	sp P77735 YAJ0_ECOLI	gi 170082402	YOR120W	Not found	Not found	Not found
gi 15609436	Rv2299c	Probable chaperone protein HtpG (heat shock protein) (HSP90 family protein) (high temperature protein G)	Not found	Not found	Not found	sp P08238 HS90B_HUMAN	Not found	Not found
gi 15609494	Rv2357c	Probable glycyl-tRNA synthetase GlyS (glycine--tRNA ligase) (GLYRS)	Not found	Not found	YBR121C	sp P41250 SYG_HUMAN	Not found	Not found
gi 15609541	Rv2404c	Probable GTP-binding protein LepA (GTP-binding elongation factor)	sp P60785 LEPA_ECOLI	gi 170082178	Not found	Not found	Not found	Not found
gi 15609549	Rv2412	30S ribosomal protein S20 RpsT	sp P0A7U7 RS20_ECOLI	gi 170079686	Not found	Not found	Not found	Not found
gi 15609556	Rv2419c	Glucosyl-3-phosphoglycerate phosphatase GpgP	sp P0A7A2 GPMB_ECOLI	gi 170083781	Not found	Not found	Not found	Not found
gi 15609565	Rv2428	Alkyl hydroperoxide reductase C protein AhpC (alkyl hydroperoxidase C)	sp P0AE08 AHP_C_ECOLI	gi 170080187	YML028W	tr Q53HC2 Q53HC2_HUMAN	sp P35700 PRDX1_MOUSE	Not found
gi 15609579	Rv2442c	50S ribosomal protein L21 RplU	sp P0AG48 RL21_ECOLI	gi 170082721	Not found	Not found	Not found	Not found
gi 15609585	Rv2448c	Probable valyl-tRNA synthase protein ValS (valyl-tRNA synthetase) (valine--tRNA ligase) (valine transase)	sp P07118 SYV_ECOLI	gi 170083697	Not found	Not found	Not found	Not found
gi 15609591	Rv2454c	Probable oxidoreductase (beta subunit)	sp P52647 NIFJ_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15609599	Rv2462c	Probable trigger factor (TF) protein Tig	sp P0A850 TIG_ECOLI	gi 170080022	Not found	Not found	Not found	Not found
gi 15609614	Rv2477c	Probable macrolide-transport ATP-binding protein ABC transporter	sp P0A9W3 YJJK_ECOLI	gi 170083777	Not found	sp P61221 ABCE1_HUMAN	sp P61222 ABCE1_MOUSE	Not found
gi 15609638	Rv2501c	Probable acetyl-/propionyl-coenzyme A carboxylase alpha chain (alpha subunit) AccA1: biotin carboxylase + biotin carboxyl carrier protein (BCCP)	sp P24182 ACCC_ECOLI	gi 170082784	Not found	Not found	sp Q99MR8 MCCA_MOUSE	Not found
gi 15609648	Rv2511	Oligoribonuclease Orn	sp P0A784 ORN_ECOLI	gi 170083611	Not found	Not found	Not found	Not found
gi 15609658	Rv2521	Probable bacterioferritin comigratory protein Bcp	sp P0AE52 BCP_ECOLI	gi 170082090	Not found	Not found	Not found	Not found
gi 15609659	Rv2522c	hypothetical protein	Not found	Not found	YFR044C	Not found	Not found	Not found
gi 15609661	Rv2524c	Probable fatty acid synthase Fas (fatty acid synthetase)	Not found	Not found	YPL231W	Not found	Not found	Not found
gi 15609671	Rv2534c	Probable elongation factor P Efp	sp P0A6N4 EFP_ECOLI	gi 170083595	Not found	Not found	Not found	Not found
gi 15609675	Rv2538c	3-dehydroquinate synthase AroB	sp P07639 AROB_ECOLI	gi 170082906	Not found	Not found	Not found	Not found
gi 15609677	Rv2540c	Probable chorismate synthase AroF (5-enolpyruvylshikimate-3-phosphate phospholyase)	sp P12008 AROC_ECOLI	gi 170081945	YGL148W	Not found	Not found	Not found
gi 15609709	Rv2572c	translase)	sp P21889 SYD_ECOLI	gi 170081522	Not found	Not found	Not found	Not found
gi 15609718	Rv2581c	Possible glyoxalase II (hydroxyacylglutathione hydrolase) (GLX II)	sp P75849 YCBL_ECOLI	Not found	Not found	sp O95571 ETHE1_HUMAN	sp Q9DCM0 ETHE1_MOUSE	Not found
gi 15609751	Rv2614c	ligase)	sp P0A8M3 SYT_ECOLI	gi 170081377	YIL078W	Not found	Not found	Not found
gi 15609840	Rv2703	RNA polymerase sigma factor SigA (sigma-A)	sp P00579 RPOD_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15609850	Rv2713	Probable soluble pyridine nucleotide transhydrogenase SthA (STH) (NAD(P)(+)-transhydrogenase [B-specific]) (nicotinamide nucleotide transhydrogenase)	sp P27306 STHA_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15609890	Rv2753c	Probable dihydrodipicolinate synthase DapA (DHDPS) (dihydrodipicolinate synthetase)	sp P0A6L2 DAPA_ECOLI	gi 170082088	Not found	Not found	Not found	Not found
gi 15609902	Rv2765	Probable alanine rich hydrolase	sp P56262 DLHH_ECOLI	Not found	Not found	Not found	Not found	Not found

gi 15609920	Rv2783c	Bifunctional protein polyribonucleotide nucleotidyltransferase GpsI: guanosine pentaphosphate synthetase + polyribonucleotide nucleotidyltransferase (polynucleotide phosphorylase) (pnase)	sp P05055 PNP_ECOLI	gi 170082701	Not found	Not found	sp Q8K1R3 PNPT1_MOUSE	Not found
gi 15609922	Rv2785c	30S ribosomal protein S15 RpsO	sp P0ADZ4 RS15_ECOLI	gi 170082702	Not found	Not found	Not found	Not found
gi 15610026	Rv2889c	Probable elongation factor Tsf (EF-ts)	sp P0A6P1 EFTS_ECOLI	gi 170079806	Not found	Not found	Not found	Not found
gi 15610027	Rv2890c	30S ribosomal protein S2 RpsB	sp P0A7V0 RS2_ECOLI	gi 170079805	Not found	Not found	Not found	Not found
gi 15610041	Rv2904c	50S ribosomal protein L19 RplS	sp P0A7K6 RL19_ECOLI	gi 170082210	Not found	Not found	Not found	Not found
gi 15610056	Rv2919c	Probable nitrogen regulatory protein P-II GlnB	sp P0A9Z1 GLNB_ECOLI	gi 170080036	Not found	Not found	Not found	Not found
gi 15610072	Rv2935	Phenolphthiocerol synthesis type-I polyketide synthase PpsE	sp P0AA19 FABD_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15610102	Rv2965c	Probable phosphopantetheine adenyltransferase KdtB (pantetheine-phosphate adenyltransferase) (PPAT) (dephospho-CoA pyrophosphorylase)	sp P0A6I6 COAD_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15610123	Rv2986c	binding protein)	sp P0ACF0 DBHA_ECOLI	gi 170083461	Not found	Not found	Not found	Not found
gi 15610139	Rv3002c	(ALS)	sp P00894 ILVH_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15610147	Rv3010c	Probable 6-phosphofructokinase PfkA (phosphohexokinase) (phosphofructokinase)	sp P0A796 K6PF1_ECOLI	gi 170083386	YGR240C	Not found	Not found	Not found
gi 15610165	Rv3028c	Probable electron transfer flavoprotein (alpha-subunit) FixB (alpha-ETF) (electron transfer flavoprotein large subunit) (ETFLS)	Not found	Not found	Not found	Not found	sp Q99LC5 ETFA_MOUSE	Not found
gi 15610166	Rv3029c	Probable electron transfer flavoprotein (beta-subunit) FixA (beta-ETF) (electron transfer flavoprotein small subunit) (ETFSS)	Not found	Not found	Not found	Not found	sp Q9DCW4 ETFB_MOUSE	Not found
gi 15610182	Rv3045	Probable NADP-dependent alcohol dehydrogenase AdhC	sp P75691 YAHK_ECOLI	Not found	YMR318C	Not found	Not found	Not found
gi 15610188	Rv3051c	Ribonucleoside-diphosphate reductase (alpha chain) NrdE (ribonucleotide reductase small subunit) (RIF protein)	sp P00452 RIR1_ECOLI	gi 170081852	Not found	Not found	Not found	Not found
gi 15610226	Rv3089	Probable chain-fatty-acid-CoA ligase FadD13 (fatty-acyl-CoA synthetase)	Not found	Not found	Not found	Not found	sp Q8VCW8 ACSF2_MOUSE	Not found
gi 15610269	Rv3133c	Two component transcriptional regulatory protein DevR (probably LuxR/UhpA-family)	sp P52106 CSGD_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15610285	Rv3149	Probable NADH dehydrogenase I (chain E) NuoE (NADH-ubiquinone oxidoreductase chain E)	sp P0AFD1 NUOE_ECOLI	gi 170081902	Not found	Not found	sp Q9D6J6 NDUV2_MOUSE	Not found
gi 15610351	Rv3215	biosynthesis)	Not found	gi 170080174	Not found	Not found	Not found	Not found
gi 15610382	Rv3246c	Two component sensory transduction transcriptional regulatory protein MtrA	sp P0AA16 OMPR_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15610382	Rv3246c	Two component sensory transduction transcriptional regulatory protein MtrA	Not found	gi 170082922	Not found	Not found	Not found	Not found
gi 15610384	Rv3248c	Probable adenosylhomocysteinase SahH (S-adenosyl-L-homocysteine hydrolase) (adohcysase)	Not found	Not found	Not found	Not found	sp P50247 SAHH_MOUSE	Not found
gi 15610410	Rv3274c	Probable acyl-CoA dehydrogenase FadE25	Not found	Not found	Not found	Not found	sp Q07417 ACADS_MOUSE	Not found
gi 15610454	Rv3318	Probable succinate dehydrogenase (flavoprotein subunit) SdhA (succinic dehydrogenase) (fumarate reductase) (fumarate dehydrogenase) (fumaric hydrogenase)	sp P0AC41 DHSA_ECOLI	gi 170080390	Not found	Not found	Not found	Not found
gi 15610472	Rv3336c	translase)	sp P00954 SYW_ECOLI	gi 170082901	Not found	Not found	Not found	Not found
gi 15610475	Rv3339c	Probable isocitrate dehydrogenase [NADP] IcdI (oxalosuccinate decarboxylase) (IDH) (NADP+-specific ICDH) (IDP)	Not found	Not found	YDL066W	Not found	sp P54071 IDHP_MOUSE	Not found
gi 15610476	Rv3340	Probable O-acetylhomoserine sulfhydrylase MetC (homocysteine synthase) (O-acetylhomoserine (thiol)-lyase) (OAH sulfhydrylase) (O-acetyl-L-homoserine sulfhydrylase)	Not found	Not found	YLR303W	Not found	Not found	Not found
gi 15610492	Rv3356c	Probable bifunctional protein FolD: methylenetetrahydrofolate dehydrogenase + methylenetetrahydrofolate cyclohydrolase	sp P24186 FOLD_ECOLI	gi 170080112	YBR084W	sp Q6UB35 C1TM_HUMAN	Not found	Not found
gi 15610532	Rv3396c	synthetase)	sp P04079 GUA_ECOLI	gi 170082117	YMR217W	Not found	Not found	Not found
gi 15610554	Rv3418c	kDa antigen)	sp P0A6F9 CH10_ECOLI	gi 170083591	YOR020C	tr Q9UNM1 Q9UNM1_HUMAN	sp Q64433 CH10_MOUSE	Not found
gi 15610568	Rv3432c	Probable glutamate decarboxylase GadB	sp P69910 DCEB_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 15610572	Rv3436c	Probable glucosamine--fructose-6-phosphate aminotransferase [isomerizing] GlmS (hexosephosphate aminotransferase) (D-fructose-6-phosphate amidotransferase) (GFAT) (L-glutamine-D-fructose-6-phosphate amidotransferase) (glucosamine-6-phosphate synthase)	sp P17169 GLMS_ECOLI	gi 170081928	YKL104C	Not found	Not found	Not found
gi 15610579	Rv3443c	50S ribosomal protein L13 RplM	sp P0AA10 RL13_ECOLI	gi 170082763	YNL069C	Not found	Not found	Not found
gi 15610593	Rv3457c	Probable DNA-directed RNA polymerase (alpha chain) RpoA (transcriptase alpha chain) (RNA polymerase alpha subunit) (DNA-directed RNA nucleotidyltransferase)	sp P0A7Z4 RPOA_ECOLI	gi 170082815	Not found	Not found	Not found	Not found
gi 15610594	Rv3458c	30S ribosomal protein S4 RpsD	sp P0A7V8 RS4_ECOLI	gi 170082816	Not found	Not found	Not found	Not found
gi 15610595	Rv3459c	30S ribosomal protein S11 RpsK	sp P0A7R9 RS11_ECOLI	gi 170082817	Not found	sp P62263 RS14_HUMAN	tr O70569 O70569_MOUSE	Not found
gi 15610734	Rv3598c	Lysyl-tRNA synthetase 1 LysS (lysine--tRNA ligase 1) (LysRS 1) (lysine translase)	sp P0A8N3 SYK1_ECOLI	gi 170082451	YDR037W	Not found	Not found	Not found
gi 15610745	Rv3609c	GTP cyclohydrolase I FolE (GTP-ch-I)	sp P0A6T5 GCHI_ECOLI	gi 170081775	Not found	Not found	Not found	Not found
gi 15610764	Rv3628	Inorganic pyrophosphatase Ppa (pyrophosphate phospho-hydrolase) (PPASE) (inorganic diphosphatase) (diphosphate phospho-hydrolase)	sp P0A7A9 IPYR_ECOLI	gi 170083670	YBR011C	sp Q15181 IPYR_HUMAN	Not found	Not found
gi 15610784	Rv3648c	Probable cold shock protein A CspA	sp P0A972 CSPE_ECOLI	gi 170080204	Not found	Not found	Not found	Not found
gi 15610803	Rv3667	Acetyl-coenzyme A synthetase Acs (acetate--CoA ligase) (acetyl-CoA synthetase) (acetyl-CoA synthase) (acyl-activating enzyme) (acetate thiokinase) (acetyl-activating enzyme) (acetate--coenzyme A ligase) (acetyl-coenzyme A synthase)	sp P27550 ACSA_ECOLI	Not found	Not found	Not found	sp Q8BGA8 ACSM5_MOUSE	Not found
gi 15610812	Rv3676	Transcriptional regulatory protein Crp (Crp/Fnr-family)	sp P0ACJ8 CRP_ECOLI	gi 170082875	Not found	Not found	Not found	Not found
gi 15610910	Rv3774	(crotonase)	Not found	Not found	Not found	Not found	sp O35459 ECH1_MOUSE	tr Q9W5W8 Q9W5W8_DROME
gi 15610913	Rv3777	Probable oxidoreductase	Not found	Not found	Not found	Not found	sp P47199 QOR_MOUSE	Not found
gi 15610926	Rv3790	Decaprenylphosphoryl-beta-D-ribose 2'-oxidase	Not found	Not found	Not found	Not found	sp P58710 GGLO_MOUSE	Not found
gi 15610936	Rv3800c	Polyketide synthase Pks13	Not found	Not found	Not found	sp P49327 FAS_HUMAN	sp P19096 FAS_MOUSE	Not found
gi 15610974	Rv3838c	Prephenate dehydratase PheA	sp P0A9J8 PHEA_ECOLI	gi 170082203	Not found	Not found	Not found	Not found
gi 15610982	Rv3846	Superoxide dismutase [FE] SodA	sp P00448 SODM_ECOLI	gi 170083379	Not found	Not found	sp P09671 SODM_MOUSE	Not found
gi 15611050	Rv3914	Thioredoxin TrxC (TRX) (MPT46)	sp P0AA25 THIO_ECOLI	gi 170083268	YGR209C	sp Q99757 THIOM_HUMAN	sp P10639 THIO_MOUSE	Not found
gi 161352467	Rv1248c	Multifunctional alpha-ketoglutarate metabolic enzyme	sp P0AFG3 ODO1_ECOLI	gi 170080392	YIL125W	Not found	Not found	Not found
gi 448824735	Rv0005	DNA gyrase (subunit B) GyrB (DNA topoisomerase (ATP-hydrolysing)) (DNA topoisomerase II) (type II DNA topoisomerase)	sp P0AES6 GYRB_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 448824753	Rv1093	Serine hydroxymethyltransferase 1 GlyA1	sp P0A825 GLYA_ECOLI	gi 170082161	YBR263W	Not found	tr Q9CZN7 Q9CZN7_MOUSE	Not found
gi 448824754	Rv1099c	Fructose 1,6-bisphosphatase GlpX	Not found	gi 170083395	Not found	Not found	Not found	Not found
gi 448824757	Rv1416	Probable riboflavin synthase beta chain RibH (6,7-dimethyl-8-ribityllumazine synthase) (DMRL synthase) (lumazine synthase)	sp P61714 RISB_ECOLI	gi 170080001	Not found	Not found	Not found	Not found
gi 448824761	Rv1649	Probable phenylalanyl-tRNA synthetase, alpha chain PheS	Not found	Not found	YFL022C	sp O95363 SYFM_HUMAN	Not found	Not found
gi 448824781	Rv2241	Pyruvate dehydrogenase E1 component AceE (pyruvate decarboxylase) (pyruvate dehydrogenase) (pyruvic dehydrogenase)	sp P0AFG8 ODP1_ECOLI	gi 170079751	Not found	Not found	Not found	Not found
gi 448824790	Rv2790c	Probable lipid-transfer protein Ltp1	Not found	Not found	Not found	Not found	sp P32020 NLTP_MOUSE	Not found
gi 448824795	Rv2993c	Possible 2-hydroxyhepta-2,4-diene-1,7-dioate isomerase (HHDD isomerase)	Not found	gi 170080808	YNL168C	Not found	sp Q3TC72 FAHD2_MOUSE	Not found

gi 448824796	Rv3001c	Probable KETOL-acid reductoisomerase IlvC (acetohydroxy-acid isomeroreductase) (alpha-keto-beta-hydroxylacil reductoisomerase)	sp P05793 ILVC_ECOLI	gi 170083263	Not found	Not found	Not found	Not found
gi 57116686	Rv0055	30S ribosomal protein S18-1 RpsR1	sp P0A7T7 RS18_ECOLI	gi 170083647	Not found	Not found	sp Q8R2L5 RT18C_MOUSE	Not found
gi 57116724	Rv0352	Probable chaperone protein DnaJ1	sp P08622 DNAJ_ECOLI	gi 170079678	Not found	Not found	Not found	Not found
gi 57116734	Rv0467	Isocitrate lyase Icl (isocitrate) (isocitratase)	sp P0A9G6 ACEA_ECOLI	gi 170083472	Not found	Not found	Not found	Not found
gi 57116739	Rv0489	PGAM)	sp P62707 GPMA_ECOLI	gi 170080415	YKL152C	Not found	sp Q9DBJ1 PGAM1_MOUSE	Not found
gi 57116747	Rv0511	Probable uroporphyrin-III C-methyltransferase HemD (uroporphyrinogen III methylase) (urogen III methylase) (SUMT) (urogen III methylase) (UROM)	Not found	gi 170082886	Not found	Not found	Not found	Not found
gi 57116764	Rv0634B	50S ribosomal protein L33 RpmG2	Not found	gi 170083144	Not found	Not found	Not found	Not found
gi 57116768	Rv0684	Probable elongation factor G FusA1 (EF-G)	sp P0A6M8 EFG_ECOLI	gi 170082858	YOR133W	Not found	sp Q8K0D5 EFGM_MOUSE	Not found
gi 57116779	Rv0761c	Possible zinc-containing alcohol dehydrogenase NAD dependent AdhB	Not found	gi 170079947	Not found	sp P11766 ADHX_HUMAN	Not found	Not found
gi 57116800	Rv0932c	Periplasmic phosphate-binding lipoprotein PstS2 (PBP-2) (PstS2)	sp P0AG82 PSTS_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 57116829	Rv1110	Probable LYTb-related protein LytB2	sp P62623 ISPH_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 57116832	Rv1121	Probable glucose-6-phosphate 1-dehydrogenase Zwf1 (G6PD)	sp P0AC53 G6PD_ECOLI	gi 170081508	YNL241C	Not found	Not found	Not found
gi 57116856	Rv1384	Probable carbamoyl-phosphate synthase large chain CarB (carbamoyl-phosphate synthetase ammonia chain)	sp P00968 CARB_ECOLI	gi 170079696	Not found	Not found	Not found	Not found
gi 57116994	Rv2467	Probable aminopeptidase N PepN (Lysyl aminopeptidase) (LYS-AP) (alanine aminopeptidase)	sp P04825 AMPN_ECOLI	gi 170080590	YKL157W	Not found	Not found	Not found
gi 57117031	Rv2861c	Methionine aminopeptidase MapB (map) (peptidase M)	sp P0AE18 MAP1_ECOLI	gi 170079804	YLR244C	Not found	Not found	Not found
gi 57117037	Rv2922A	Probable acylphosphatase AcyP (acylphosphate phosphohydrolase)	sp P0AB65 ACYP_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 57117042	Rv2996c	Probable D-3-phosphoglycerate dehydrogenase SerA1 (PGDH)	Not found	Not found	Not found	Not found	sp Q61753 SERA_MOUSE	Not found
gi 57117044	Rv3003c	Acetolactate synthase (large subunit) IlvB1 (acetohydroxy-acid synthase)	sp P00893 ILV1_ECOLI	Not found	Not found	Not found	Not found	Not found
gi 57117051	Rv3048c	Ribonucleoside-diphosphate reductase (beta chain) NrdF2 (ribonucleotide reductase small subunit) (R2F protein)	sp P69924 RIR2_ECOLI	gi 170081853	YJL026W	Not found	Not found	Not found
gi 57117168	Rv3907c	Probable poly(A) polymerase PcnA (polynucleotide adenyllyltransferase) (NTP polymerase) (RNA adenylating enzyme) (poly(A) polymerase)	sp P0ABF1 PCNB_ECOLI	gi 170079780	Not found	Not found	Not found	Not found