

**Experiment**

**DnarL\_R1 vs.H37Rv\_R1**

**DATASET S1**

**AEROBIC GROWTH (- Nitrate)**

**DnarL\_R2 vs.H37Rv\_R2(DS)**

Gene	Fold_DnarL_R1 vs.H37Rv_R1	Fold_DnarL_R2 vs.H37Rv_R2(DS)	Geomean Fold_DnarL	SD	P-value	Regulation	Description
PE20	0.965	1.425	1.195	0.52	0.100	Up	Rv1806, PE FAMILY PROTEIN
lat	-0.801	-1.415	-1.108	0.14	0.131	Down	Rv3290c, PROBABLE L-LYSINE-EPSILON AMINOTRANSFERASE
PPE39	-1.444	-1.186	-1.315	0.05	0.057	Down	Rv2353c, PPE FAMILY PROTEIN
Rv0188	-1.146	-1.796	-1.471	0.12	0.139	Down	Rv0188, PROBABLE CONSERVED TRANSMEMBRANE PROTEIN
Rv3289c	-1.044	-1.401	-1.223	0.08	0.078	Down	Rv3289c, POSSIBLE TRANSMEMBRANE PROTEIN

## Experiment

DnarL\_N\_R1 vs.H37Rv\_N\_R1

DATASET S2

AEROBIC GROWTH (+NITRATE)

DnarL\_N\_R2 vs.H37Rv\_N\_R2(DS)

Gene	Fold_DnarL_N_R1 vs.H37Rv	Fold_DnarL_N_R2 vs.H37Rv_N	Geomean Fold_DnarL_N	SD	P-value	Regulation	Description
PPE38	1.250	0.998	1.124	0.269	0.055	Up	Rv2352c, PPE FAMILY PROTEIN
rpmG1	1.157	0.942	1.049	0.219	0.047	Up	Rv2057c, Probable ribosomal protein L33
Rv0076c	1.136	1.077	1.107	0.062	0.013	Up	Rv0076c, PROBABLE MEMBRANE PROTEIN
Rv0268c	1.189	0.916	1.052	0.277	0.060	Up	Rv0268c, HYPOTHETICAL PROTEIN
Rv0965c	0.895	1.012	0.954	0.112	0.026	Up	Rv0965c, CONSERVED HYPOTHETICAL PROTEIN
Rv1765A	1.469	1.130	1.300	0.411	0.074	Up	Rv1765A, PUTATIVE TRANSPOSASE FRAGMENT
Rv2023A	1.052	0.953	1.003	0.098	0.022	Up	Rv2023A, HYPOTHETICAL PROTEIN
Rv2136c	1.195	1.036	1.116	0.169	0.035	Up	Rv2136c, Possible conserved transmembrane protein
Rv2142c	1.440	1.392	1.416	0.063	0.011	Up	Rv2142c, HYPOTHETICAL PROTEIN
Rv2452c	1.500	1.997	1.749	0.823	0.108	Up	Rv2452c, HYPOTHETICAL PROTEIN
Rv2562	1.006	0.889	0.948	0.111	0.026	Up	Rv2562, CONSERVED HYPOTHETICAL PROTEIN
Rv2961	1.549	0.955	1.252	0.699	0.128	Up	Rv2961, PROBABLE TRANSPOSASE
Rv3742c	1.027	0.886	0.957	0.135	0.031	Up	Rv3742c, POSSIBLE OXIDOREDUCTASE
Rv3745c	1.272	0.813	1.043	0.466	0.100	Up	Rv3745c, CONSERVED HYPOTHETICAL PROTEIN
whiB7	1.323	1.161	1.242	0.188	0.036	Up	Rv3197A, PROBABLE TRANSCRIPTIONAL REGULATORY PROTEIN WHIB-LIKE V
acg	-1.391	-1.419	-1.144	0.005	0.006	Down	Rv2032, Conserved hypothetical protein Acg
fdxA	-1.312	-1.744	-1.120	0.074	0.094	Down	Rv2007c, PROBABLE FERREDOXIN FDxA
gltA1	-1.812	-1.393	-1.350	0.068	0.091	Down	Rv1131, PROBABLE CITRATE SYNTHASE I GLTA1
lat	-1.371	-0.856	-1.123	0.117	0.111	Down	Rv3290c, PROBABLE L-LYSINE-EPSILON AMINOTRANSFERASE LAT L-LYSINE A
mmpL6	-0.888	-1.040	-0.951	0.038	0.034	Down	Rv1557, PROBABLE CONSERVED TRANSMEMBRANE TRANSPORT PROTEIN M
narK2	-1.005	-0.821	-1.030	0.048	0.041	Down	Rv1737c, POSSIBLE NITRATENITRITE TRANSPORTER NARK2
narL	-6.067	-6.545	-2.064	0.003	0.104	Down	Rv0844c, POSSIBLE NITRATENITRITE RESPONSE TRANSCRIPTIONAL REGULAT
pdhC	-0.950	-1.013	-0.988	0.016	0.014	Down	Rv2495c, PROBABLE DIHYDROLIPOAMIDE S-ACETYLTRANSFERASE E2 COMP
Rv0079	-1.488	-1.383	-1.228	0.019	0.023	Down	Rv0079, HYPOTHETICAL PROTEIN
Rv0188	-0.936	-1.190	-0.987	0.060	0.056	Down	Rv0188, PROBABLE CONSERVED TRANSMEMBRANE PROTEIN
Rv0569	-0.961	-1.041	-1.033	0.020	0.018	Down	Rv0569, CONSERVED HYPOTHETICAL PROTEIN
Rv1130	-1.247	-1.271	-1.084	0.005	0.005	Down	Rv1130, CONSERVED HYPOTHETICAL PROTEIN
Rv1687c	-2.161	-2.058	-1.489	0.012	0.023	Down	Rv1687c, PROBABLE CONSERVED ATP-BINDING PROTEIN ABC TRANSPORTER
Rv1701	-0.914	-1.057	-0.962	0.035	0.031	Down	Rv1701, PROBABLE INTEGRASERECOMBINASE
Rv1733c	-1.116	-0.861	-1.055	0.063	0.056	Down	Rv1733c, PROBABLE CONSERVED TRANSMEMBRANE PROTEIN
Rv1734c	-1.485	-2.031	-1.213	0.080	0.118	Down	Rv1734c, CONSERVED HYPOTHETICAL PROTEIN
Rv1738	-1.696	-1.822	-1.298	0.018	0.028	Down	Rv1738, CONSERVED HYPOTHETICAL PROTEIN
Rv1856c	-1.162	-1.101	-1.067	0.013	0.013	Down	Rv1856c, POSSIBLE OXIDOREDUCTASE
Rv1996	-2.601	-2.466	-1.645	0.011	0.030	Down	Rv1996, CONSERVED HYPOTHETICAL PROTEIN
Rv2028c	-1.394	-1.140	-1.159	0.052	0.056	Down	Rv2028c, CONSERVED HYPOTHETICAL PROTEIN
Rv2087	-0.955	-1.716	-1.038	0.150	0.161	Down	Rv2087, CONSERVED HYPOTHETICAL PROTEIN
Rv2627c	-0.937	-1.061	-0.990	0.030	0.027	Down	Rv2627c, CONSERVED HYPOTHETICAL PROTEIN
Rv2650c	-1.068	-1.339	-1.046	0.058	0.059	Down	Rv2650c, POSSIBLE phiRv2 PROPHAGE PROTEIN
Rv2989	-0.997	-1.027	-1.042	0.007	0.007	Down	Rv2989, PROBABLE TRANSCRIPTIONAL REGULATORY PROTEIN
Rv3094c	-1.141	-1.152	-1.060	0.002	0.002	Down	Rv3094c, CONSERVED HYPOTHETICAL PROTEIN
Rv3127	-1.439	-1.751	-1.173	0.051	0.068	Down	Rv3127, CONSERVED HYPOTHETICAL PROTEIN
Rv3128c	-1.524	-1.451	-1.253	0.013	0.016	Down	Rv3128c, CONSERVED HYPOTHETICAL PROTEIN
Rv3130c	-1.951	-1.968	-1.430	0.002	0.004	Down	Rv3130c, CONSERVED HYPOTHETICAL PROTEIN
Rv3131	-4.092	-3.987	-1.798	0.003	0.023	Down	Rv3131, CONSERVED HYPOTHETICAL PROTEIN
Rv3134c	-1.094	-1.166	-1.052	0.016	0.016	Down	Rv3134c, CONSERVED HYPOTHETICAL PROTEIN

Experiment							
DL48h hyp-rep1 JM11_Cy5 vs. Rv48h hyp-rep1 JM9_Cy3				DATASET 53		48 h HYPOXIA	
DL48h hyp-rep2 JM12_Cy3 vs. Rv48h hyp-rep2 JM10_Cy5 (DS)							
Gene	Fold_delta48h hyp_rep1	Fold_delta48h hyp_rep2	Geomean Fold_delta48h	SD	Regulation	P-value	Description
accA2	0.721	0.700	0.710	0.017	Up	0.005	Rv0973c, PROBABLE ACETYL-PROPIONYL-COENZYME A CARBOXYLASE ALPHA CHAIN ALPHA SUBUNIT ACCA2: BIOTIN CARBOXYLASE + BIOTIN CARBOXYL CARRIER PROTEIN BCCP
icl	0.626	0.609	0.618	0.012	Up	0.004	Rv0467, ISOCITRATE LYASE ICL ISOCITRASE ISOCITRATASE
mmpl13b	1.303	1.536	1.420	0.306	Up	0.051	Rv1146, PROBABLE CONSERVED TRANSMEMBRANE TRANSPORT PROTEIN MMPL13B
moaB1	0.708	2.449	1.579	2.705	Up	0.315	Rv3110, PROBABLE PTERIN-4-ALPHA-CARBINOLAMINE DEHYDRATASE MOA1 PHS 4-ALPHA- HYDROXY-TETRAHYDROPTERIN DEHYDRATASE PTERIN-4-A-CARBINOLAMINE DEHYDRATASE
ppsC	0.732	0.672	0.702	0.048	Up	0.013	Rv2933, PHENOLPTHIACEROL SYNTHESIS TYPE-I POLYKETIDE SYNTHASE PPSC
Rv0850	0.891	1.798	1.345	1.148	Up	0.188	Rv0850, PUTATIVE TRANSPOSASE FRAGMENT
Rv1118c	0.620	0.928	0.774	0.259	Up	0.067	Rv1118c, CONSERVED HYPOTHETICAL PROTEIN
Rv2265	1.054	1.956	1.505	1.275	Up	0.187	Rv2265, Possible conserved integral membrane protein
Rv2812	0.611	2.682	1.647	3.457	Up	0.351	Rv2812, PROBABLE TRANSPOSASE
Rv3333c	0.604	4.723	2.663	17.604	Up	0.463	Rv3333c, HYPOTHETICAL PROLINE RICH PROTEIN
Rv3448	0.735	1.302	1.019	0.567	Up	0.122	Rv3448, PROBABLE CONSERVED INTEGRAL MEMBRANE PROTEIN
Rv3640c	0.685	4.110	2.397	11.077	Up	0.441	Rv3640c, PROBABLE TRANSPOSASE
Rv3839	0.669	1.574	1.121	0.980	Up	0.188	Rv3839, CONSERVED HYPOTHETICAL PROTEIN
tyrT	2.735	0.927	1.831	3.363	Up	0.323	MTB000005, tRNA-Tyr
ugpA	0.750	2.219	1.485	2.102	Up	0.279	Rv2835c, PROBABLE Sn-GLYCEROL-3-PHOSPHATE TRANSPORT INTEGRAL MEMBRANE PROTEIN ABC TRANSPORTER UGPA
alaT	-0.685	-1.183	-0.934	0.128	Down	0.108	MTB000002, tRNA-Ala
alaU	-1.229	-1.495	-1.362	0.051	Down	0.058	MTB000041, tRNA-Ala
cysU	-0.989	-0.643	-0.816	0.097	Down	0.076	MTB000037, tRNA-Cys
gltA1	-1.835	-1.103	-1.469	0.131	Down	0.155	Rv1131, PROBABLE CITRATE SYNTHASE I GLTA1
Rv0188	-1.088	-0.741	-0.914	0.091	Down	0.076	Rv0188, PROBABLE CONSERVED TRANSMEMBRANE PROTEIN
Rv1130	-1.013	-1.502	-1.258	0.101	Down	0.106	Rv1130, CONSERVED HYPOTHETICAL PROTEIN
Rv2452c	-0.762	-0.745	-0.753	0.005	Down	0.004	Rv2452c, HYPOTHETICAL PROTEIN
Rv2699c	-0.661	-0.759	-0.710	0.029	Down	0.022	Rv2699c, CONSERVED HYPOTHETICAL PROTEIN
valT	-0.745	-0.686	-0.716	0.018	Down	0.013	MTB000035, tRNA-Val
valU	-0.687	-1.308	-0.997	0.154	Down	0.133	MTB000038, tRNA-Val
valV	-1.074	-1.025	-1.050	0.012	Down	0.011	MTB000027, tRNA-Val