

Table S1. Expression indices for genes in *M. tuberculosis* during non-replicating persistence.
Entries putatively involved in respiration are highlighted.

ORF ^a	Name ^a	Functional Class ^a	Expression index ^b	Variance ^c
Rv0001	dnaA	information pathways	3.1	0.0020
Rv0009	ppiA	information pathways	4.6	0.0001
Rv0020c	Rv0020c	conserved hypotheticals	3.3	0.0001
Rv0040c	Rv0040c	conserved hypotheticals	2.6	0.0009
Rv0046c	Rv0046c	conserved hypotheticals	2.3	0.0000
Rv0056	rplI	information pathways	2.9	0.0000
Rv0068	Rv0068	intermediary metabolism and respiration	1.4	0.0010
Rv0127	Rv0127	conserved hypotheticals	1.6	0.0047
Rv0141c	Rv0141c	unknown	1.1	0.0064
Rv0144	Rv0144	regulatory proteins	1.1	0.0067
Rv0157	pntB	intermediary metabolism and respiration	3.6	0.0004
Rv0164	Rv0164	conserved hypotheticals	3.2	0.0001
Rv0165c	Rv0165c	regulatory proteins	1.1	0.0000
Rv0167	Rv0167	virulence, detoxification, adaptation	2.3	0.0054
Rv0170	Rv0170	virulence, detoxification, adaptation	3.2	0.0001
Rv0171	Rv0171	virulence, detoxification, adaptation	2.8	0.0026
Rv0172	Rv0172	virulence, detoxification, adaptation	3.3	0.0003
Rv0173	lprK	cell wall and cell processes	3.3	0.0083
Rv0174	Rv0174	virulence, detoxification, adaptation	2.8	0.0015
Rv0176	Rv0176	conserved hypotheticals	3.0	0.0000
Rv0177	Rv0177	conserved hypotheticals	1.9	0.0085
Rv0221	Rv0221	conserved hypotheticals	1.5	0.0038
Rv0222	echA1	lipid metabolism	2.6	0.0001
Rv0227c	Rv0227c	cell wall and cell processes	3.4	0.0032
Rv0232	Rv0232	regulatory proteins	2.4	0.0046
Rv0234c	gabD2	intermediary metabolism and respiration	3.2	0.0096
Rv0247c	Rv0247c	intermediary metabolism and respiration	3.2	0.0024
Rv0248c	Rv0248c	intermediary metabolism and respiration	1.8	0.0053
Rv0249c	Rv0249c	cell wall and cell processes	2.7	0.0029
Rv0257c	Rv0257c	unknown	1.3	0.0074
Rv0259c	Rv0259c	conserved hypotheticals	1.2	0.0018
Rv0265c	fecB2	cell wall and cell processes	1.2	0.0059
Rv0269c	Rv0269c	conserved hypotheticals	1.5	0.0018
Rv0281	Rv0281	conserved hypotheticals	1.2	0.0035
Rv0284	Rv0284	conserved hypotheticals	1.9	0.0010
Rv0286	PPE	PE/PPE	1.7	0.0013
Rv0287	Rv0287	regulatory proteins	1.7	0.0000
Rv0288	Rv0288	conserved hypotheticals	1.7	0.0007
Rv0290	Rv0290	cell wall and cell processes	1.1	0.0089
Rv0309	Rv0309	unknown	4.8	0.0038
Rv0331	Rv0331	intermediary metabolism and respiration	2.3	0.0065
Rv0334	rmlA	intermediary metabolism and respiration	1.3	0.0004
Rv0338c	Rv0338c	conserved hypotheticals	1.7	0.0028
Rv0341	Rv0341	conserved hypotheticals	1.7	0.0002
Rv0343	Rv0343	conserved hypotheticals	2.0	0.0075
Rv0361	Rv0361	cell wall and cell processes	1.5	0.0038
Rv0364	Rv0364	conserved hypotheticals	1.7	0.0003
Rv0379	sec	cell wall and cell processes	4.3	0.0044
Rv0413	mutT3	information pathways	1.2	0.0010

Rv0419	<i>lpqM</i>	cell wall and cell processes	1.4	0.0025
Rv0424c	<i>Rv0424c</i>	unknown	2.0	0.0012
Rv0425c	<i>ctpH</i>	cell wall and cell processes	2.4	0.0006
Rv0430	<i>Rv0430</i>	unknown	5.5	0.0068
Rv0432	<i>sodC</i>	virulence, detoxification, adaptation	3.0	0.0002
Rv0433	<i>Rv0433</i>	conserved hypotheticals	4.7	0.0030
Rv0434	<i>Rv0434</i>	conserved hypotheticals	1.0	0.0039
Rv0440	<i>groEL2</i>	virulence, detoxification, adaptation	2.1	0.0033
Rv0447c	<i>ufaA1</i>	lipid metabolism	3.0	0.0056
Rv0448c	<i>Rv0448c</i>	conserved hypotheticals	1.6	0.0017
Rv0462	<i>Rv0462</i>	intermediary metabolism and respiration	1.8	0.0070
Rv0464c	<i>Rv0464c</i>	conserved hypotheticals	2.3	0.0046
Rv0466	<i>Rv0466</i>	conserved hypotheticals	3.0	0.0000
Rv0469	<i>umaA1</i>	lipid metabolism	5.7	0.0065
Rv0470c	<i>umaA2</i>	lipid metabolism	1.5	0.0000
Rv0479c	<i>Rv0479c</i>	cell wall and cell processes	2.8	0.0003
Rv0485	<i>Rv0485</i>	regulatory proteins	2.4	0.0106
Rv0489	<i>gpm</i>	intermediary metabolism and respiration	3.4	0.0007
Rv0501	<i>gale1</i>	intermediary metabolism and respiration	3.7	0.0023
Rv0502	<i>Rv0502</i>	conserved hypotheticals	1.1	0.0003
Rv0503c	<i>cmaA2</i>	lipid metabolism	2.5	0.0026
Rv0510	<i>hemC</i>	intermediary metabolism and respiration	2.1	0.0002
Rv0523c	<i>Rv0523c</i>	conserved hypotheticals	1.2	0.0011
Rv0532	<i>PE_PGRS</i>	PE/PPE	1.2	0.0076
Rv0545c	<i>pitA</i>	cell wall and cell processes	2.2	0.0052
Rv0554	<i>bpoC</i>	virulence, detoxification, adaptation	7.2	0.0031
Rv0561c	<i>Rv0561c</i>	intermediary metabolism and respiration	1.3	0.0090
Rv0578c	<i>PE_PGRS</i>	PE/PPE	1.3	0.0003
Rv0608	<i>Rv0608</i>	conserved hypotheticals	1.9	0.0042
Rv0613c	<i>Rv0613c</i>	unknown	4.7	0.0023
Rv0620	<i>galK</i>	intermediary metabolism and respiration	1.7	0.0004
Rv0627	<i>Rv0627</i>	conserved hypotheticals	1.6	0.0007
Rv0632c	<i>echA3</i>	lipid metabolism	2.4	0.0011
Rv0636	<i>Rv0636</i>	unknown	2.0	0.0069
Rv0637	<i>Rv0637</i>	conserved hypotheticals	4.0	0.0047
Rv0642c	<i>mmaA4</i>	lipid metabolism	5.0	0.0008
Rv0643c	<i>mmaA3</i>	lipid metabolism	4.5	0.0028
Rv0655	<i>Rv0655</i>	cell wall and cell processes	1.4	0.0012
Rv0667	<i>rpoB</i>	information pathways	1.1	0.0097
Rv0679c	<i>Rv0679c</i>	cell wall and cell processes	1.7	0.0103
Rv0682	<i>rpsL</i>	information pathways	2.5	0.0023
Rv0685	<i>tuf</i>	information pathways	2.2	0.0002
Rv0692	<i>Rv0692</i>	unknown	8.6	0.0000
Rv0693	<i>pqqE</i>	intermediary metabolism and respiration	12.8	0.0057
Rv0700	<i>rpsJ</i>	information pathways	2.0	0.0059
Rv0701	<i>rplC</i>	information pathways	1.2	0.0073
Rv0702	<i>rplD</i>	information pathways	2.4	0.0035
Rv0703	<i>rplW</i>	information pathways	2.9	0.0016
Rv0704	<i>rplB</i>	information pathways	1.8	0.0054
Rv0705	<i>rpss</i>	information pathways	1.5	0.0020
Rv0710	<i>rpsQ</i>	information pathways	4.2	0.0017
Rv0711	<i>atsA</i>	intermediary metabolism and respiration	1.2	0.0068
Rv0714	<i>rplN</i>	information pathways	2.4	0.0001

Rv0715	rplX	information pathways	2.1	0.0028
Rv0716	rplE	information pathways	3.1	0.0000
Rv0717	rpsN	information pathways	4.7	0.0015
Rv0719	rplF	information pathways	3.9	0.0006
Rv0721	rpsE	information pathways	1.1	0.0004
Rv0731c	Rv0731c	conserved hypotheticals	1.3	0.0000
Rv0732	secY	cell wall and cell processes	3.5	0.0041
Rv0733	adk	intermediary metabolism and respiration	4.2	0.0036
Rv0741	Rv0741	insertion seqs and phages	1.2	0.0003
Rv0748	Rv0748	conserved hypotheticals	1.6	0.0033
Rv0755c	PPE	PE/PPE	1.4	0.0106
Rv0759c	Rv0759c	conserved hypotheticals	2.4	0.0019
Rv0760c	Rv0760c	conserved hypotheticals	4.6	0.0039
Rv0761c	adhB	intermediary metabolism and respiration	4.5	0.0105
Rv0809	purM	intermediary metabolism and respiration	3.1	0.0000
Rv0814c	sseC2	intermediary metabolism and respiration	4.1	0.0015
Rv0815c	cysA2	intermediary metabolism and respiration	4.3	0.0000
Rv0831c	Rv0831c	conserved hypotheticals	2.5	0.0016
Rv0857	Rv0857	conserved hypotheticals	3.0	0.0000
Rv0863	Rv0863	conserved hypotheticals	2.7	0.0003
Rv0896	gltA2	intermediary metabolism and respiration	2.9	0.0000
Rv0905	echA6	lipid metabolism	2.6	0.0032
Rv0909	Rv0909	unknown	1.8	0.0032
Rv0925c	Rv0925c	unknown	4.6	0.0039
Rv0931c	pknD	regulatory proteins	1.1	0.0027
Rv0932c	pstS	cell wall and cell processes	1.3	0.0064
Rv0934	phoS1	cell wall and cell processes	3.3	0.0030
Rv0951	sucC	intermediary metabolism and respiration	5.0	0.0042
Rv0952	sucD	intermediary metabolism and respiration	3.4	0.0016
Rv1013	pks16	lipid metabolism	2.5	0.0000
Rv1031	kdpC	cell wall and cell processes	2.1	0.0085
Rv1074c	fada3	lipid metabolism	1.2	0.0008
Rv1076	lipU	intermediary metabolism and respiration	3.0	0.0042
Rv1078	pra	conserved hypotheticals	4.3	0.0019
Rv1083	Rv1083	conserved hypotheticals	1.9	0.0009
Rv1091	PE_PGRS	PE/PPE	1.3	0.0000
Rv1093	glyA	intermediary metabolism and respiration	1.4	0.0036
Rv1096	Rv1096	intermediary metabolism and respiration	2.6	0.0084
Rv1097c	Rv1097c	cell wall and cell processes	1.5	0.0001
Rv1103c	Rv1103c	unknown	1.1	0.0014
Rv1107c	xseB	intermediary metabolism and respiration	2.5	0.0009
Rv1109c	Rv1109c	unknown	1.4	0.0023
Rv1113	Rv1113	unknown	1.2	0.0076
Rv1119c	Rv1119c	unknown	1.5	0.0007
Rv1125	Rv1125	unknown	1.0	0.0072
Rv1129c	Rv1129c	regulatory proteins	1.5	0.0023
Rv1140	Rv1140	conserved hypotheticals	1.4	0.0004
Rv1142c	echA10	lipid metabolism	1.0	0.0012
Rv1155	Rv1155	unknown	1.1	0.0034
Rv1157c	Rv1157c	conserved hypotheticals	2.0	0.0000
Rv1172c	PE	PE/PPE	2.0	0.0002
Rv1177	fdxC	intermediary metabolism and respiration	1.9	0.0036
Rv1182	papA3	lipid metabolism	1.3	0.0033

<i>Rv1185c</i>	<i>fadD21</i>	lipid metabolism	2.0	0.0065
<i>Rv1192</i>	<i>Rv1192</i>	unknown	1.0	0.0015
<i>Rv1194c</i>	<i>Rv1194c</i>	conserved hypotheticals	1.2	0.0057
<i>Rv1196</i>	<i>PPE</i>	PE/PPE	3.4	0.0001
<i>Rv1197</i>	<i>Rv1197</i>	conserved hypotheticals	1.1	0.0101
<i>Rv1201c</i>	<i>Rv1201c</i>	conserved hypotheticals	3.1	0.0024
<i>Rv1211</i>	<i>Rv1211</i>	conserved hypotheticals	1.2	0.0003
<i>Rv1215c</i>	<i>Rv1215c</i>	conserved hypotheticals	3.8	0.0006
<i>Rv1233c</i>	<i>Rv1233c</i>	unknown	4.0	0.0015
<i>Rv1234</i>	<i>Rv1234</i>	unknown	1.0	0.0080
<i>Rv1240</i>	<i>mdh</i>	intermediary metabolism and respiration	2.5	0.0002
<i>Rv1249c</i>	<i>Rv1249c</i>	cell wall and cell processes	2.4	0.0049
<i>Rv1261c</i>	<i>Rv1261c</i>	conserved hypotheticals	2.0	0.0027
<i>Rv1270c</i>	<i>lprA</i>	cell wall and cell processes	3.2	0.0015
<i>Rv1274</i>	<i>lprB</i>	cell wall and cell processes	1.7	0.0038
<i>Rv1277</i>	<i>Rv1277</i>	unknown	2.2	0.0009
<i>Rv1293</i>	<i>lysA</i>	intermediary metabolism and respiration	1.4	0.0039
<i>Rv1295</i>	<i>thrC</i>	intermediary metabolism and respiration	3.1	0.0004
<i>Rv1304</i>	<i>atpB</i>	intermediary metabolism and respiration	14.8	0.0099
<i>Rv1305</i>	<i>atpE</i>	intermediary metabolism and respiration	3.8	0.0006
<i>Rv1306</i>	<i>atpF</i>	intermediary metabolism and respiration	11.1	0.0023
<i>Rv1307</i>	<i>atpH</i>	intermediary metabolism and respiration	4.9	0.0011
<i>Rv1308</i>	<i>atpA</i>	intermediary metabolism and respiration	8.4	0.0041
<i>Rv1309</i>	<i>atpG</i>	intermediary metabolism and respiration	5.4	0.0008
<i>Rv1310</i>	<i>atpD</i>	intermediary metabolism and respiration	5.6	0.0068
<i>Rv1311</i>	<i>atpC</i>	intermediary metabolism and respiration	4.0	0.0000
<i>Rv1312</i>	<i>Rv1312</i>	conserved hypotheticals	3.5	0.0035
<i>Rv1324</i>	<i>Rv1324</i>	unknown	2.4	0.0001
<i>Rv1340</i>	<i>rphA</i>	intermediary metabolism and respiration	2.6	0.0051
<i>Rv1342c</i>	<i>pks14</i>	lipid metabolism	3.2	0.0009
<i>Rv1361c</i>	<i>PPE</i>	PE/PPE	6.2	0.0028
<i>Rv1379</i>	<i>pyrR</i>	regulatory proteins	3.2	0.0003
<i>Rv1391</i>	<i>dfp</i>	intermediary metabolism and respiration	1.3	0.0045
<i>Rv1392</i>	<i>metK</i>	intermediary metabolism and respiration	1.1	0.0005
<i>Rv1395</i>	<i>Rv1395</i>	regulatory proteins	1.4	0.0002
<i>Rv1410c</i>	<i>Rv1410c</i>	cell wall and cell processes	1.6	0.0004
<i>Rv1411c</i>	<i>lprG</i>	cell wall and cell processes	1.6	0.0018
<i>Rv1415</i>	<i>ribA2</i>	intermediary metabolism and respiration	2.7	0.0006
<i>Rv1418</i>	<i>IprH</i>	cell wall and cell processes	1.1	0.0037
<i>Rv1423</i>	<i>Rv1423</i>	regulatory proteins	3.3	0.0042
<i>Rv1424c</i>	<i>Rv1424c</i>	cell wall and cell processes	1.1	0.0023
<i>Rv1425</i>	<i>Rv1425</i>	conserved hypotheticals	2.0	0.0010
<i>Rv1435c</i>	<i>Rv1435c</i>	conserved hypotheticals	5.5	0.0039
<i>Rv1436</i>	<i>gap</i>	intermediary metabolism and respiration	2.8	0.0074
<i>Rv1445c</i>	<i>devB</i>	intermediary metabolism and respiration	1.2	0.0017
<i>Rv1448c</i>	<i>tal</i>	intermediary metabolism and respiration	4.5	0.0042
<i>Rv1449c</i>	<i>tkt</i>	intermediary metabolism and respiration	1.2	0.0088
<i>Rv1451</i>	<i>ctaB</i>	intermediary metabolism and respiration	1.1	0.0102
<i>Rv1469</i>	<i>ctpD</i>	cell wall and cell processes	1.4	0.0013
<i>Rv1475c</i>	<i>acn</i>	intermediary metabolism and respiration	2.5	0.0005
<i>Rv1479</i>	<i>moxR</i>	regulatory proteins	1.1	0.0021
<i>Rv1499</i>	<i>Rv1499</i>	unknown	1.6	0.0002
<i>Rv1515c</i>	<i>Rv1515c</i>	conserved hypotheticals	2.0	0.0014

<i>Rv1517</i>	<i>Rv1517</i>	conserved hypotheticals	1.0	0.0025
<i>Rv1527c</i>	<i>pks5</i>	lipid metabolism	1.5	0.0001
<i>Rv1576c</i>	<i>Rv1576c</i>	insertion seqs and phages	1.3	0.0000
<i>Rv1584c</i>	<i>Rv1584c</i>	insertion seqs and phages	1.2	0.0009
<i>Rv1591</i>	<i>Rv1591</i>	conserved hypotheticals	2.5	0.0012
<i>Rv1594</i>	<i>nadA</i>	intermediary metabolism and respiration	5.0	0.0009
<i>Rv1595</i>	<i>nadB</i>	intermediary metabolism and respiration	3.5	0.0000
<i>Rv1611</i>	<i>trpC</i>	intermediary metabolism and respiration	3.5	0.0025
<i>Rv1613</i>	<i>trpA</i>	intermediary metabolism and respiration	2.8	0.0002
<i>Rv1623c</i>	<i>appC</i>	intermediary metabolism and respiration	3.5	0.0000
<i>Rv1626</i>	<i>Rv1626</i>	regulatory proteins	3.6	0.0008
<i>Rv1630</i>	<i>rpsA</i>	information pathways	1.9	0.0018
<i>Rv1643</i>	<i>rpIT</i>	information pathways	1.1	0.0004
<i>Rv1676</i>	<i>Rv1676</i>	intermediary metabolism and respiration	1.5	0.0005
<i>Rv1677</i>	<i>dsbF</i>	cell wall and cell processes	5.0	0.0038
<i>Rv1694</i>	<i>tlyA</i>	virulence, detoxification, adaptation	1.3	0.0023
<i>Rv1697</i>	<i>Rv1697</i>	conserved hypotheticals	4.8	0.0001
<i>Rv1698</i>	<i>Rv1698</i>	conserved hypotheticals	5.8	0.0090
<i>Rv1700</i>	<i>Rv1700</i>	conserved hypotheticals	2.1	0.0036
<i>Rv1703c</i>	<i>Rv1703c</i>	intermediary metabolism and respiration	2.7	0.0000
<i>Rv1731</i>	<i>gabD1</i>	intermediary metabolism and respiration	3.2	0.0009
<i>Rv1743</i>	<i>pknE</i>	regulatory proteins	1.5	0.0002
<i>Rv1747</i>	<i>Rv1747</i>	cell wall and cell processes	4.7	0.0014
<i>Rv1748</i>	<i>Rv1748</i>	unknown	1.4	0.0001
<i>Rv1749c</i>	<i>Rv1749c</i>	cell wall and cell processes	3.4	0.0012
<i>Rv1753c</i>	<i>PPE</i>	PE/PPE	2.3	0.0076
<i>Rv1770</i>	<i>Rv1770</i>	conserved hypotheticals	1.4	0.0004
<i>Rv1778c</i>	<i>Rv1778c</i>	unknown	1.1	0.0049
<i>Rv1798</i>	<i>Rv1798</i>	conserved hypotheticals	1.3	0.0015
<i>Rv1807</i>	<i>PPE</i>	PE/PPE	2.5	0.0000
<i>Rv1809</i>	<i>PPE</i>	PE/PPE	1.3	0.0093
<i>Rv1810</i>	<i>Rv1810</i>	conserved hypotheticals	1.7	0.0046
<i>Rv1816</i>	<i>Rv1816</i>	regulatory proteins	1.9	0.0041
<i>Rv1821</i>	<i>secA2</i>	cell wall and cell processes	1.3	0.0029
<i>Rv1837c</i>	<i>glcB</i>	intermediary metabolism and respiration	2.2	0.0083
<i>Rv1843c</i>	<i>guaB1</i>	intermediary metabolism and respiration	1.2	0.0092
<i>Rv1862</i>	<i>adhA</i>	intermediary metabolism and respiration	1.0	0.0086
<i>Rv1876</i>	<i>bfrA</i>	intermediary metabolism and respiration	2.1	0.0049
<i>Rv1883c</i>	<i>Rv1883c</i>	conserved hypotheticals	1.5	0.0001
<i>Rv1884c</i>	<i>Rv1884c</i>	conserved hypotheticals	7.1	0.0081
<i>Rv1887</i>	<i>Rv1887</i>	unknown	1.8	0.0007
<i>Rv1903</i>	<i>Rv1903</i>	cell wall and cell processes	1.4	0.0031
<i>Rv1904</i>	<i>Rv1904</i>	conserved hypotheticals	1.1	0.0050
<i>Rv1906c</i>	<i>Rv1906c</i>	conserved hypotheticals	1.5	0.0026
<i>Rv1909c</i>	<i>furA</i>	regulatory proteins	1.5	0.0007
<i>Rv1916</i>	<i>aceAb</i>	intermediary metabolism and respiration	1.0	0.0053
<i>Rv1934c</i>	<i>fade17</i>	lipid metabolism	2.1	0.0004
<i>Rv1947</i>	<i>Rv1947</i>	unknown	4.9	0.0032
<i>Rv1987</i>	<i>Rv1987</i>	cell wall and cell processes	4.8	0.0003
<i>Rv2056c</i>	<i>rpsN2</i>	information pathways	1.7	0.0016
<i>Rv2061c</i>	<i>Rv2061c</i>	unknown	3.9	0.0021
<i>Rv2066</i>	<i>cobi</i>	intermediary metabolism and respiration	1.4	0.0004
<i>Rv2071c</i>	<i>cobM</i>	intermediary metabolism and respiration	2.5	0.0056

Rv2074	Rv2074	unknown	2.3	0.0017
Rv2080	IppJ	cell wall and cell processes	2.2	0.0022
Rv2093c	Rv2093c	cell wall and cell processes	1.3	0.0066
Rv2109c	prcA	intermediary metabolism and respiration	1.2	0.0020
Rv2119	Rv2119	conserved hypotheticals	1.2	0.0068
Rv2127	ansP	cell wall and cell processes	6.6	0.0038
Rv2128	Rv2128	unknown	2.5	0.0014
Rv2138	IppL	cell wall and cell processes	2.2	0.0013
Rv2141c	dapE2	intermediary metabolism and respiration	1.3	0.0020
Rv2145c	wag31	cell wall and cell processes	1.8	0.0089
Rv2147c	Rv2147c	unknown	3.1	0.0048
Rv2160c	Rv2160c	unknown	1.8	0.0004
Rv2165c	Rv2165c	conserved hypotheticals	2.5	0.0044
Rv2171	IppM	cell wall and cell processes	2.7	0.0000
Rv2175c	Rv2175c	regulatory proteins	1.5	0.0010
Rv2181	Rv2181	cell wall and cell processes	1.5	0.0024
Rv2185c	Rv2185c	conserved hypotheticals	3.1	0.0001
Rv2187	fadD15	lipid metabolism	2.0	0.0001
Rv2190c	Rv2190c	virulence, detoxification, adaptation	8.3	0.0059
Rv2191	Rv2191	information pathways	2.1	0.0040
Rv2193	ctaE	intermediary metabolism and respiration	5.6	0.0076
Rv2194	qcrC	intermediary metabolism and respiration	5.4	0.0013
Rv2195	qcrA	intermediary metabolism and respiration	7.6	0.0001
Rv2196	qcrB	intermediary metabolism and respiration	5.5	0.0021
Rv2199c	Rv2199c	cell wall and cell processes	2.4	0.0009
Rv2200c	ctac	intermediary metabolism and respiration	5.6	0.0014
Rv2209	Rv2209	cell wall and cell processes	2.1	0.0059
Rv2239c	Rv2239c	unknown	1.5	0.0004
Rv2241	aceE	intermediary metabolism and respiration	1.1	0.0001
Rv2245	kasA	lipid metabolism	1.7	0.0051
Rv2259	adhE2	intermediary metabolism and respiration	1.5	0.0044
Rv2269c	Rv2269c	unknown	1.6	0.0004
Rv2271	Rv2271	unknown	6.0	0.0076
Rv2275	Rv2275	unknown	1.1	0.0021
Rv2283	Rv2283	unknown	2.1	0.0048
Rv2291	sseB	intermediary metabolism and respiration	1.9	0.0053
Rv2309c	Rv2309c	insertion seqs and phages	2.5	0.0059
Rv2328	PE	PE/PPE	1.6	0.0003
Rv2334	cysK	intermediary metabolism and respiration	1.6	0.0060
Rv2335	cysE	intermediary metabolism and respiration	1.4	0.0001
Rv2339	mmpL9	cell wall and cell processes	3.2	0.0001
Rv2348c	Rv2348c	unknown	2.8	0.0005
Rv2370c	Rv2370c	conserved hypotheticals	2.1	0.0082
Rv2375	Rv2375	unknown	1.0	0.0001
Rv2376c	Rv2376c	conserved hypotheticals	3.0	0.0001
Rv2391	nirA	intermediary metabolism and respiration	4.2	0.0004
Rv2392	cysH	intermediary metabolism and respiration	2.3	0.0005
Rv2421c	Rv2421c	conserved hypotheticals	1.7	0.0021
Rv2428	ahpC	virulence, detoxification, adaptation	3.3	0.0000
Rv2431c	PE	PE/PPE	2.2	0.0062
Rv2442c	rplU	information pathways	1.7	0.0014
Rv2457c	clpX	intermediary metabolism and respiration	1.5	0.0003
Rv2459	Rv2459	cell wall and cell processes	2.9	0.0009

<i>Rv2461c</i>	<i>clpP</i>	intermediary metabolism and respiration	1.2	0.0052
<i>Rv2465c</i>	<i>rpi</i>	intermediary metabolism and respiration	1.3	0.0003
<i>Rv2467</i>	<i>pepD</i>	intermediary metabolism and respiration	2.2	0.0027
<i>Rv2477c</i>	<i>Rv2477c</i>	cell wall and cell processes	2.1	0.0029
<i>Rv2493</i>	<i>Rv2493</i>	conserved hypotheticals	2.1	0.0035
<i>Rv2500c</i>	<i>fadE19</i>	lipid metabolism	1.5	0.0000
<i>Rv2503c</i>	<i>scoB</i>	lipid metabolism	1.3	0.0023
<i>Rv2516c</i>	<i>Rv2516c</i>	unknown	2.3	0.0060
<i>Rv2590</i>	<i>fadD9</i>	lipid metabolism	1.3	0.0042
<i>Rv2607</i>	<i>pdxH</i>	intermediary metabolism and respiration	1.7	0.0016
<i>Rv2673</i>	<i>Rv2673</i>	cell wall and cell processes	1.6	0.0009
<i>Rv2706c</i>	<i>Rv2706c</i>	unknown	1.6	0.0000
<i>Rv2794c</i>	<i>Rv2794c</i>	conserved hypotheticals	3.1	0.0000
<i>Rv2813</i>	<i>Rv2813</i>	cell wall and cell processes	2.0	0.0042
<i>Rv2843</i>	<i>Rv2843</i>	unknown	1.7	0.0000
<i>Rv2850c</i>	<i>Rv2850c</i>	intermediary metabolism and respiration	1.1	0.0028
<i>Rv2883c</i>	<i>pyrH</i>	intermediary metabolism and respiration	3.6	0.0007
<i>Rv2899c</i>	<i>fdhD</i>	intermediary metabolism and respiration	1.5	0.0001
<i>Rv2900c</i>	<i>fdhF</i>	intermediary metabolism and respiration	1.3	0.0022
<i>Rv2908c</i>	<i>Rv2908c</i>	conserved hypotheticals	2.1	0.0024
<i>Rv2909c</i>	<i>rpsP</i>	information pathways	1.9	0.0032
<i>Rv2914c</i>	<i>pknI</i>	regulatory proteins	1.1	0.0012
<i>Rv2919c</i>	<i>glnB</i>	regulatory proteins	1.0	0.0028
<i>Rv2927c</i>	<i>Rv2927c</i>	conserved hypotheticals	9.2	0.0016
<i>Rv2928</i>	<i>tesA</i>	lipid metabolism	5.3	0.0021
<i>Rv2929</i>	<i>Rv2929</i>	unknown	3.1	0.0017
<i>Rv2930</i>	<i>fadD26</i>	lipid metabolism	1.1	0.0082
<i>Rv2937</i>	<i>drrB</i>	cell wall and cell processes	2.1	0.0002
<i>Rv2950c</i>	<i>fadD29</i>	lipid metabolism	1.5	0.0010
<i>Rv2954c</i>	<i>Rv2954c</i>	unknown	1.1	0.0063
<i>Rv2956</i>	<i>Rv2956</i>	conserved hypotheticals	3.4	0.0024
<i>Rv2958c</i>	<i>Rv2958c</i>	intermediary metabolism and respiration	1.3	0.0015
<i>Rv2982c</i>	<i>gpda2</i>	lipid metabolism	1.2	0.0011
<i>Rv2994</i>	<i>Rv2994</i>	cell wall and cell processes	2.5	0.0068
<i>Rv3028c</i>	<i>fixB</i>	intermediary metabolism and respiration	1.2	0.0099
<i>Rv3029c</i>	<i>fixA</i>	intermediary metabolism and respiration	1.9	0.0023
<i>Rv3043c</i>	<i>ctaD</i>	intermediary metabolism and respiration	1.2	0.0003
<i>Rv3044</i>	<i>fecB</i>	cell wall and cell processes	1.1	0.0012
<i>Rv3101c</i>	<i>ftsX</i>	cell wall and cell processes	1.5	0.0036
<i>Rv3117</i>	<i>cysA3</i>	intermediary metabolism and respiration	3.9	0.0006
<i>Rv3118</i>	<i>sseC</i>	intermediary metabolism and respiration	3.5	0.0002
<i>Rv3147</i>	<i>nuoC</i>	intermediary metabolism and respiration	2.4	0.0008
<i>Rv3148</i>	<i>nuoD</i>	intermediary metabolism and respiration	2.2	0.0015
<i>Rv3150</i>	<i>nuoF</i>	intermediary metabolism and respiration	1.3	0.0075
<i>Rv3151</i>	<i>nuoG</i>	intermediary metabolism and respiration	3.6	0.0010
<i>Rv3155</i>	<i>nuoK</i>	intermediary metabolism and respiration	1.7	0.0053
<i>Rv3157</i>	<i>nuoM</i>	intermediary metabolism and respiration	1.6	0.0086
<i>Rv3193c</i>	<i>Rv3193c</i>	cell wall and cell processes	2.2	0.0006
<i>Rv3205c</i>	<i>Rv3205c</i>	unknown	1.4	0.0018
<i>Rv3207c</i>	<i>Rv3207c</i>	unknown	1.6	0.0017
<i>Rv3209</i>	<i>Rv3209</i>	conserved hypotheticals	4.5	0.0013
<i>Rv3211</i>	<i>rhIE</i>	information pathways	1.0	0.0000
<i>Rv3213c</i>	<i>Rv3213c</i>	cell wall and cell processes	3.3	0.0002

Rv3224	Rv3224	intermediary metabolism and respiration	1.2	0.0007
Rv3246c	<i>mtrA</i>	regulatory proteins	2.1	0.0063
Rv3260c	<i>whiB2</i>	regulatory proteins	5.2	0.0021
Rv3281	Rv3281	conserved hypotheticals	2.5	0.0011
Rv3285	<i>acca3</i>	lipid metabolism	1.2	0.0065
Rv3307	<i>deoD</i>	intermediary metabolism and respiration	2.1	0.0005
Rv3320c	Rv3320c	conserved hypotheticals	1.7	0.0001
Rv3334	Rv3334	regulatory proteins	2.0	0.0060
Rv3356c	<i>folD</i>	intermediary metabolism and respiration	1.0	0.0001
Rv3376	Rv3376	conserved hypotheticals	2.5	0.0040
Rv3377c	Rv3377c	intermediary metabolism and respiration	1.7	0.0000
Rv3387	Rv3387	insertion seqs and phages	1.9	0.0039
Rv3390	<i>lpqD</i>	cell wall and cell processes	2.3	0.0002
Rv3408	Rv3408	conserved hypotheticals	1.0	0.0067
Rv3409c	<i>choD</i>	lipid metabolism	1.4	0.0044
Rv3413c	Rv3413c	unknown	1.1	0.0071
Rv3414c	<i>sigD</i>	information pathways	4.7	0.0032
Rv3418c	<i>groES</i>	virulence, detoxification, adaptation	3.0	0.0018
Rv3425	<i>PPE</i>	PE/PPE	1.4	0.0002
Rv3429	<i>PPE</i>	PE/PPE	1.6	0.0001
Rv3443c	<i>rplM</i>	information pathways	1.2	0.0102
Rv3465	<i>rmIC</i>	intermediary metabolism and respiration	1.3	0.0073
Rv3476c	<i>kgtP</i>	cell wall and cell processes	1.7	0.0001
Rv3477	<i>PE</i>	PE/PPE	1.4	0.0031
Rv3478	<i>PPE</i>	PE/PPE	4.4	0.0000
Rv3495c	<i>lprN</i>	cell wall and cell processes	4.8	0.0055
Rv3497c	Rv3497c	virulence, detoxification, adaptation	5.9	0.0033
Rv3522	Rv3522	regulatory proteins	1.7	0.0053
Rv3524	Rv3524	cell wall and cell processes	1.7	0.0048
Rv3528c	Rv3528c	unknown	3.6	0.0001
Rv3569c	Rv3569c	intermediary metabolism and respiration	1.5	0.0003
Rv3597c	<i>lsr2</i>	conserved hypotheticals	1.5	0.0006
Rv3624c	<i>hpt</i>	intermediary metabolism and respiration	3.5	0.0001
Rv3635	Rv3635	cell wall and cell processes	2.0	0.0008
Rv3648c	<i>cspA</i>	virulence, detoxification, adaptation	4.9	0.0043
Rv3669	Rv3669	unknown	2.1	0.0097
Rv3673c	Rv3673c	intermediary metabolism and respiration	1.7	0.0001
Rv3679	Rv3679	cell wall and cell processes	3.4	0.0068
Rv3682	<i>ponA'</i>	cell wall and cell processes	2.0	0.0008
Rv3688c	Rv3688c	conserved hypotheticals	1.4	0.0039
Rv3694c	Rv3694c	conserved hypotheticals	2.6	0.0064
Rv3715c	<i>recR</i>	information pathways	1.2	0.0008
Rv3720	Rv3720	lipid metabolism	1.1	0.0017
Rv3725	Rv3725	intermediary metabolism and respiration	1.6	0.0026
Rv3747	Rv3747	conserved hypotheticals	1.3	0.0025
Rv3749c	Rv3749c	unknown	2.7	0.0017
Rv3755c	Rv3755c	unknown	1.1	0.0053
Rv3757c	<i>proW</i>	virulence, detoxification, adaptation	2.7	0.0071
Rv3760	Rv3760	conserved hypotheticals	1.0	0.0021
Rv3763	Rv3763	cell wall and cell processes	3.2	0.0004
Rv3771c	Rv3771c	conserved hypotheticals	1.8	0.0021
Rv3775	<i>lipE</i>	intermediary metabolism and respiration	2.1	0.0019
Rv3779	Rv3779	cell wall and cell processes	2.0	0.0010

<i>Rv3795</i>	<i>embB</i>	cell wall and cell processes	2.6	0.0000
<i>Rv3803c</i>	<i>fbpC1</i>	lipid metabolism	1.1	0.0093
<i>Rv3804c</i>	<i>fbpA</i>	lipid metabolism	3.6	0.0003
<i>Rv3806c</i>	<i>Rv3806c</i>	cell wall and cell processes	2.1	0.0043
<i>Rv3809c</i>	<i>glf</i>	cell wall and cell processes	1.2	0.0015
<i>Rv3810</i>	<i>pirG</i>	cell wall and cell processes	4.4	0.0094
<i>Rv3815c</i>	<i>Rv3815c</i>	intermediary metabolism and respiration	2.1	0.0036
<i>Rv3823c</i>	<i>mmpL8</i>	cell wall and cell processes	1.1	0.0011
<i>Rv3824c</i>	<i>papA1</i>	lipid metabolism	1.3	0.0004
<i>Rv3846</i>	<i>sodA</i>	virulence, detoxification, adaptation	1.5	0.0056
<i>Rv3853</i>	<i>Rv3853</i>	intermediary metabolism and respiration	1.7	0.0068
<i>Rv3864</i>	<i>Rv3864</i>	conserved hypotheticals	1.2	0.0047
<i>Rv3882c</i>	<i>Rv3882c</i>	conserved hypotheticals	1.2	0.0020
<i>Rv3920c</i>	<i>Rv3920c</i>	conserved hypotheticals	1.1	0.0080
<i>Rv3921c</i>	<i>Rv3921c</i>	cell wall and cell processes	1.1	0.0007

^aORF, gene and functional class as described <http://genolist.pasteur.fr/TubercuList/>

^bexpression index = $\frac{\text{expression intensity of RvXXXX in NRP}}{\text{expression intensity of RvXXXX in growing cultures}}$ / mean channel expression intensity in NRP / mean channel intensity in growing cultures

^cvariance ANOVA calculated from independent biological replicates

Table S2. Structures of aminoalkoxydiphenylmethane derivatives.

Compound	Structure
CSU-11	
CSU-12	
CSU-13	
CSU-17	
CSU-18	
CSU-20	

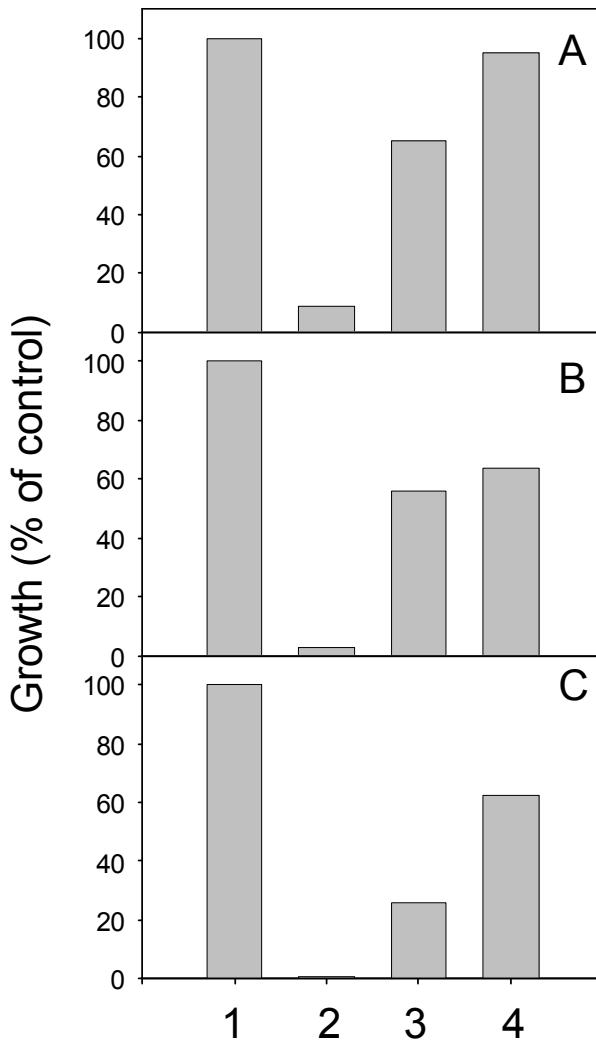


Fig. S1. Rescue of bacterial growth and oxygen consumption by menaquinone (Vitamin K2) or phylloquinone (Vitamin K1). *M. smegmatis* was cultured in the presence of 10 (Panel A), 20 (Panel B), or 40 μ M (Panel C) Ro 48-8071. Lane 1: control (no Ro 48-8071); Lane 2: no supplementation; Lane 3: medium supplemented with 400 μ M vitamin K1; Lane 4: medium supplemented with 400 μ M Vitamin K2. Mid-log phase cultures (OD_{600} of 0.5-0.8) grown in 7H9 medium (supplemented with oleic acid, albumin, dextrose and 0.05% Tween 80) were diluted 1:100 and dispensed into 48 well plates and treated with the indicated concentrations of Ro 48-8071 and vitamin K1 or K2.

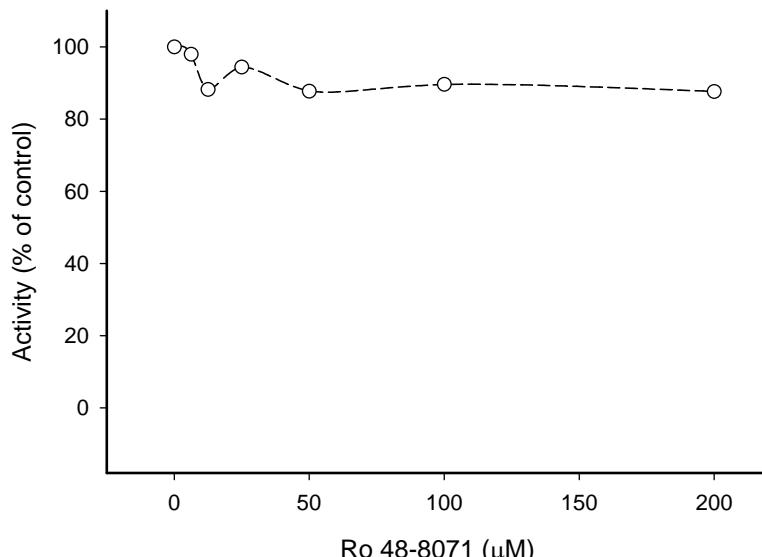


Fig. S2. The effect of Ro 48-8071 on total prenyl diphosphate activity in membranes

isolated from *M. tuberculosis*. Prenyl diphosphate synthase activity was assayed essentially as previously published (Crick,D.C., Schulbach,M.C., Zink,E.E., Macchia,M., Barontini,S., Besra,G.S., and Brennan,P.J. (2000) Polyprenyl phosphate biosynthesis in *Mycobacterium tuberculosis* and *Mycobacterium smegmatis*. *J Bacteriol* **182**: 5771-5778). Reaction mixtures containing 50 mM MOPS (pH 7.9), 5 mM phosphatase inhibitor cocktail (Roche), 5 mM MgCl₂, 2.5 mM dithiothreitol, 0.3% Triton X-100, 100 μM farnesyl diphosphate, 30 μM [¹⁴C]isopentenyl diphosphate, and 100 μg of *M. tuberculosis* membrane protein in a final volume of 200 μl were incubated at 37°C for 60 min. The reaction was stopped by the addition of 1 ml of water saturated with NaCl and radiolabeled products (prenyl diphosphates) were extracted with n-butanol saturated with water. An aliquot of the extract was taken and newly synthesized products were quantitated by liquid scintillation spectrometry.

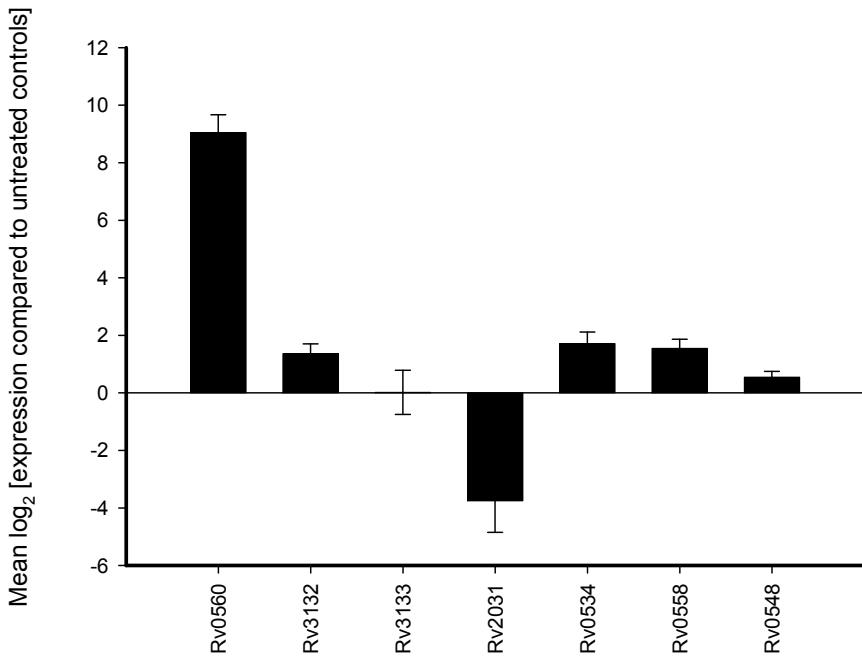


Fig. S3. Quantitative real-time PCR analysis of selected genes in response to treatment with Ro 48-8071. *M. tuberculosis* (H37Rv) was grown to early log phase and subsequently diluted to an OD₆₀₀ of 0.1 OD at 600nm in 7H9 medium containing OADC and some cultures were treated with 50 μ M Ro 48-8071 for 6 h at 37 °C. Total RNA was isolated as described in Methods and cDNA was generated using the SuperScript™ III First-Strand Synthesis System for RT-PCR (Invitrogen). Primer sequences were designed using the Primer3-web interface. QRT-PCR was performed with an iCycler iQ real-time PCR detection system (Bio-Rad Laboratories) using Platinum® SYBR® Green qPCR SuperMix UDG (Invitrogen). All reactions were performed in triplicate on independent total RNA preparations. Performance of each primer-set was evaluated using genomic DNA to establish specific amplification characteristics. The number of targets in each sample for each gene corresponding to the threshold cycle for each PCR was determined based on the specific standard curves generated for each primer set.

The relative number of transcripts for each gene was determined from standard curves established for each primer set by linear regression of data obtained using 100 ng, 10 ng, and 1 ng of *M. tuberculosis* (H37Rv) genomic DNA. Amplification results were visualized and analyzed using BioRad iCycler software and results for each gene was determined relative to paired untreated control. Data are average values +/- SD from three independent biological samples.