

**Table S4. Differentially regulated genes in ESX-3-depleted *M. tuberculosis***

Upregulated genes					
Locus	Gene Name	q-value	Fold induction	Gene Product/Function	Regulation
ORF01283		0	12.96	Hypothetical ORF	
ORFD1079		0	7.33	Hypothetical ORF	
ORF00540		0	2.1	Hypothetical ORF	
Rv0097		0	5.3 (15)	Possible oxidoreductase, predicted to be in SenX3-RegX3 regulon	
Rv0099	<i>fadD10</i>	0.75	7.57	Possible fatty-acid-CoA ligase	
Rv0146		0	2.48	Possible methyltransferase S-adenosylmethionine dependent	
Rv0211	<i>pckA</i>	0	2.49	Probable iron-regulated phosphoenolpyruvate carboxykinase	
Rv0280	PPE3	0	8.99	Unknown function	Zur
Rv0281		0.75	2.8	Possible S-adenosylmethionine dependent methyl transferase	Zur
Rv0450c	<i>mmpL4</i>	0.64	2.01	Siderophore export protein	IdeR
Rv0451c	<i>mmpS4</i>	0.65	2.29	Siderophore export protein	IdeR
Rv0465c		0	2.37	Probable transcriptional regulatory protein	IdeR-independent iron repressed
Rv0467	<i>icl1</i>	0	3.32	Isocitrate lyase	IdeR-independent iron repressed
Rv0468	<i>fadB2</i>	0	1.82	Involved in the butyryl-butanol producing pathway/Probable 3-hydroxybutyryl-CoA dehydrogenase	
Rv1342c	<i>pks14</i>	0	2.31	Conserved membran protein	
Rv1343c	<i>lprD</i>	0	2.27	Probable conserved lipoprotein	IdeR
Rv1344	<i>mbtL</i>	0	2.28	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv1347c	<i>mbtK</i>	0	3.92	Lysine N-acetyltransferase/ Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins/	IdeR
Rv1348	<i>irtA</i>	2.22	4.78 (5.4)	Iron regulated transporter	IdeR
Rv1349	<i>irtB</i>	3.78	2.39	Iron regulated transporter	IdeR
Rv1460		0	2.32 (2.4)	Probable transcriptional regulatory protein	IdeR-independent iron repressed
Rv1461		0	2.79	Conserved hypothetical protein	IdeR-independent iron repressed
Rv1462		0.82	2.44	Conserved hypothetical protein	IdeR-independent iron repressed
Rv1463		0	2.62	Probable ABC transporter	IdeR-independent iron repressed
Rv1464	<i>csd</i>	0	2.61	Probable cysteine desulfurase	IdeR-independent iron repressed
Rv1465		0.72	2.06	Possible nitrogen fixation related protein	IdeR-independent iron repressed
Rv1466		0	2.59	Conserved hypothetical protein	IdeR-independent iron repressed
Rv1519		0	2.96	Conserved hypothetical protein	IdeR

Rv1592c		0	2.1	Conserved hypothetical protein	
Rv1854	<i>ndh</i>	0	2.03	NADH dehydrogenase	
Rv2055c	<i>rpsR2</i>	0	12.39	Probable ribosomal protein S18/ involved in translation	Zur
Rv2056c	<i>rpsN2</i>	0	15.76	Probable ribosomal protein S14/ involved in translation	Zur
Rv2057c	<i>rpmG</i>	0	17.67	Probable ribosomal protein L33/ involved in translation	Zur
Rv2058c	<i>rpmB2</i>	0	15.13 (9.8)	Probable ribosomal protein L28/ involved in translation	Zur
Rv2059		0	2.73 (3.9)	Similar to periplasmic metal binding proteins of ABC transport system	Zur
Rv2060		1,19	2.53	Similar to ZnuB, ABC-type Mn2/Zn2 transport systems, permease components	Zur
Rv2121c	<i>hisG</i>	2,01	2.09	Thought to be involved in histidine biosynthesis/ Probable ATP phosphoribosyltransferase	
Rv2122c	<i>hisI/hisE</i>	0	5.13	Probable phosphoribosyl-AMP pyrophosphatase/ thought to be involved in histidine biosynthesis	IdeR
Rv2123	PPE37	0	10.75	PPE family	IdeR
Rv2377c	<i>mbtH</i>	0,8	3.68	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2380c	<i>mbtE</i>	2.01	5.08	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2381c	<i>mbtD</i>	0	5.92	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2382c	<i>mbtC</i>	0	7.51	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2383c	<i>mbtB</i>	0	8.6 (27.1)	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2384c	<i>mbtA</i>	2.47	2.4	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2386c	<i>mbtI</i>	0	21.43	Thought to be involved in the biogenesis of the hydroxyphenyloxaoline-containing siderophore mycobactins	IdeR
Rv2429	<i>ahpD</i>	0	4.22	Involved in response to oxidative stress/Alkyl hydroperoxide reductase D protein	
Rv2707		0	2.07	Conserved transmembrane alanine and leucine rich protein	
Rv3403c		3.9	1.9	Hypothetical protein	IdeR
Rv3839		0	9.88	Conserved hypothetical protein	IdeR
Rv3840		0	2.99	Probable transcriptional regulatory protein	IdeR
Rv3862c	<i>whiB6</i>	0	2.19	Probable transcriptional regulatory protein whiB-like	

#### Down regulated genes

Locus	Gene Name	q-value	Fold repression	Gene Product/Function	Regulation
ORFD0126		0	0.57	Hypothetical ORF	
Rv0165c	<i>mce1R</i>	0	0.65	Probable transcriptional regulatory protein	
Rv0166	<i>fadD5</i>	0	0.51	Involved in lipid degradation/probable fatty-acid-CoA ligase	
Rv0283	<i>eccB3</i>	0	0.25	Esx-3 component/Membrane protein	IdeR/Zur
Rv0285	PE	2.17	0.27	Esx-3 component/PE5	IdeR/Zur
Rv0289	<i>eccG3</i>	0.88	0.24	Esx-3 component/ESX-1 secreted associated protein ESPG3	IdeR/Zur
Rv0290	<i>eccD3</i>	0	0.19	Esx-3 component/Transmembrane protein	IdeR/Zur
Rv0291	<i>mycP3</i>	0	0.27	Esx-3 component/Serine protease (subtilisin-like protease)	IdeR/Zur

Rv0292	<i>eccE3</i>	0	0.24	Esx-3 component/Transmembrane protein	IdeR/Zur
Rv0458		0	0.61	Probable aldehyde dehydrogenase	
Rv1813c		0	0.49	Conserved hypothetical protein/ regulated by MprA and DosR	
Rv3145	<i>nuoA</i>	0	0.34	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase I (chain A)	Iron induced
Rv3147	<i>nuoC</i>	0	0.48	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase I (chain C)	Iron induced
Rv3148	<i>nuoD</i>	5.58	0.42	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase I (chain D)	Iron induced
Rv3149	<i>nuoE</i>	0	0.48	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain E)	Iron induced
Rv3151	<i>nuoG</i>	0	0.59	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain G)	Iron induced
Rv3152	<i>nuoH</i>	0.88	0.54	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain H)	Iron induced
Rv3153	<i>nuoI</i>	0	0.55	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain I)	Iron induced
Rv3154	<i>nuoJ</i>	0	0.6	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain J)	Iron induced
Rv3156	<i>nuoL</i>	5.46	0.59	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain L)	Iron induced
Rv3157	<i>nuoM</i>	2.46	0.52	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain M)	Iron induced
Rv3158	<i>nuoN</i>	1.14	0.67	Involved in aerobic-anaerobic respiration/probable NADH dehydrogenase (chain N)	Iron induced
Rv3295		0	0.47	Probable transcriptional regulatory protein (Tet-R family)	
Rv3550	<i>echA20</i>	0	0.6	Enoyl-CoA hydratase	

Differently expressed genes were defined by a  $q$ -value equal to 0 and a fold difference  $\geq 1.8$  (induced) or  $\leq 0.6$  (repressed). Differentially regulated genes with  $q$ -value until 5,58 were included if part of an operon or regulon differentially regulated or if their up regulation was observed by real time RT-PCR (i.e. *irtA* and *irtB*). Values in brackets indicate the fold induction determined by quantitative real time RT-PCR. Genes were annotated as described in TUBERCULIST <http://tuberculist.epfl.ch/>