

Supplementary Table 1. Data information of the Global dataset.

Continent	Country	Title of the original article	Total strain number	No. of MDR-TB strains	Cohort or population-based collection
Europe	UK	Whole-genome sequencing for prediction of Mycobacterium tuberculosis drug susceptibility and resistance: a retrospective cohort study.	1859	90	72
		Whole-genome sequencing for rapid susceptibility testing of M. tuberculosis.			
		Whole-genome sequencing to delineate Mycobacterium tuberculosis outbreaks: a retrospective observational study.			
		Clinical application of whole-genome sequencing to inform treatment for multidrug-resistant tuberculosis cases.			
		Assessment of Mycobacterium tuberculosis transmission in Oxfordshire, UK, 2007-12, with whole pathogen genome sequences: an observational study.			
Europe	Germany	Whole-genome sequencing for prediction of Mycobacterium tuberculosis drug susceptibility and resistance: a retrospective cohort study.	814	7	7
		Whole-genome-based Mycobacterium tuberculosis surveillance: a standardized, portable, and expandable approach.			
	Netherlands	Inferring patient to patient transmission of Mycobacterium tuberculosis from whole genome sequencing data.	207	2	
	Switzerland	Tracking a tuberculosis outbreak over 21 years: strain-specific single-nucleotide polymorphism typing combined with targeted whole-genome sequencing.	74	3	
	Russia	Evolution and transmission of drug resistant tuberculosis in a Russian population	1285	546	
Asia	China	Genome sequencing of 161 Mycobacterium tuberculosis isolates from China identifies genes and intergenic regions associated with drug resistance	283	99	
	Uzbekistan	Whole-genome sequencing for prediction of Mycobacterium tuberculosis drug susceptibility and resistance: a retrospective cohort study.	260	237	237
North America	Canada	Population genomics of Mycobacterium tuberculosis in the Inuit.	221	0	
		Marked microevolution of a unique Mycobacterium tuberculosis strain in 17 years of ongoing transmission in a high risk population.			
Africa	South-Africa	Whole-genome sequencing for prediction of Mycobacterium tuberculosis drug susceptibility and resistance: a retrospective cohort study.	1021	284	276
		Whole genome sequencing reveals genomic heterogeneity and antibiotic purification in Mycobacterium tuberculosis isolates.			
		Evolution of Extensively Drug-Resistant Tuberculosis over Four Decades: Whole Genome Sequencing and Dating Analysis of Mycobacterium tuberculosis Isolates from KwaZulu-Natal.			

Sierra Leone	Whole-genome sequencing for prediction of Mycobacterium tuberculosis drug susceptibility and resistance: a retrospective cohort study.	70	10	10
Malawi	Large-scale whole genome sequencing of M. tuberculosis provides insights into transmission in a high prevalence area	2268	33	
Mali	Whole Genome Sequencing of Mycobacterium africanum Strains from Mali Provides Insights into the Mechanisms of Geographic Restriction	91	35	

Supplementary Table 2. Drug-resistant mutations that were used to identify MDR-TB strains in this study.

Antibiotics	Drug resistant genes	Loci in H37Rv	Wild type	Mutant type	Codon change
RIFAMPICIN	rpoB	760314	G	T	V170F
RIFAMPICIN	rpoB	760663	C	T	A286V
RIFAMPICIN	rpoB	761004	A	G	T400A
RIFAMPICIN	rpoB	761033	G	T	Q409H
RIFAMPICIN	rpoB	761033	G	C	Q409H
RIFAMPICIN	rpoB	761074	A	C	E423A
RIFAMPICIN	rpoB	761076	T	C	F424L
RIFAMPICIN	rpoB	761076	T	G	F424V
RIFAMPICIN	rpoB	761077	T	C	F424S
RIFAMPICIN	rpoB	761078	C	A	F424L
RIFAMPICIN	rpoB	761078	C	G	F424L
RIFAMPICIN	rpoB	761082	G	A	G426S
RIFAMPICIN	rpoB	761083	G	A	G426D
RIFAMPICIN	rpoB	761085	A	T	T427S
RIFAMPICIN	rpoB	761085	A	C	T427P
RIFAMPICIN	rpoB	761085	A	G	T427A
RIFAMPICIN	rpoB	761086	C	G	T427S
RIFAMPICIN	rpoB	761088	A	C	S428R
RIFAMPICIN	rpoB	761089	G	T	S428I
RIFAMPICIN	rpoB	761089	G	C	S428T
RIFAMPICIN	rpoB	761090	C	A	S428R
RIFAMPICIN	rpoB	761090	C	G	S428R
RIFAMPICIN	rpoB	761091	C	A	Q429K
RIFAMPICIN	rpoB	761093	G	T	Q429H
RIFAMPICIN	rpoB	761093	G	C	Q429H
RIFAMPICIN	rpoB	761094	C	G	L430V
RIFAMPICIN	rpoB	761095	T	C	L430P
RIFAMPICIN	rpoB	761095	T	G	L430R
RIFAMPICIN	rpoB	761097	A	C	S431R
RIFAMPICIN	rpoB	761097	A	G	S431G
RIFAMPICIN	rpoB	761098	G	T	S431I
RIFAMPICIN	rpoB	761098	G	C	S431T
RIFAMPICIN	rpoB	761099	C	A	S431R
RIFAMPICIN	rpoB	761099	C	G	S431R
RIFAMPICIN	rpoB	761100	C	A	Q432K
RIFAMPICIN	rpoB	761100	C	T	Q432*
RIFAMPICIN	rpoB	761100	C	G	Q432E
RIFAMPICIN	rpoB	761101	A	T	Q432L
RIFAMPICIN	rpoB	761101	A	C	Q432P
RIFAMPICIN	rpoB	761101	A	G	Q432R
RIFAMPICIN	rpoB	761102	A	T	Q432H
RIFAMPICIN	rpoB	761102	A	C	Q432H
RIFAMPICIN	rpoB	761103	T	C	F433L
RIFAMPICIN	rpoB	761103	T	G	F433V
RIFAMPICIN	rpoB	761105	C	A	F433L
RIFAMPICIN	rpoB	761105	C	G	F433L
RIFAMPICIN	rpoB	761107	T	C	M434T
RIFAMPICIN	rpoB	761108	G	A	M434I

RIFAMPICIN	rpoB	761108	G	T	M434I
RIFAMPICIN	rpoB	761108	G	C	M434I
RIFAMPICIN	rpoB	761109	G	A	D435N
RIFAMPICIN	rpoB	761109	G	T	D435Y
RIFAMPICIN	rpoB	761109	G	C	D435H
RIFAMPICIN	rpoB	761110	A	T	D435V
RIFAMPICIN	rpoB	761110	A	C	D435A
RIFAMPICIN	rpoB	761110	A	G	D435G
RIFAMPICIN	rpoB	761111	C	A	D435E
RIFAMPICIN	rpoB	761111	C	G	D435E
RIFAMPICIN	rpoB	761113	A	T	Q436L
RIFAMPICIN	rpoB	761114	G	T	Q436H
RIFAMPICIN	rpoB	761114	G	C	Q436H
RIFAMPICIN	rpoB	761115	A	T	N437Y
RIFAMPICIN	rpoB	761115	A	C	N437H
RIFAMPICIN	rpoB	761115	A	G	N437D
RIFAMPICIN	rpoB	761116	A	T	N437I
RIFAMPICIN	rpoB	761116	A	C	N437T
RIFAMPICIN	rpoB	761120	C	A	N438K
RIFAMPICIN	rpoB	761120	C	G	N438K
RIFAMPICIN	rpoB	761124	C	A	L440M
RIFAMPICIN	rpoB	761125	T	C	L440P
RIFAMPICIN	rpoB	761128	C	T	S441L
RIFAMPICIN	rpoB	761128	C	G	S441W
RIFAMPICIN	rpoB	761130	G	T	G442W
RIFAMPICIN	rpoB	761131	G	C	G442A
RIFAMPICIN	rpoB	761134	T	C	L443S
RIFAMPICIN	rpoB	761134	T	G	L443W
RIFAMPICIN	rpoB	761136	A	C	T444P
RIFAMPICIN	rpoB	761137	C	T	T444I
RIFAMPICIN	rpoB	761139	C	A	H445N
RIFAMPICIN	rpoB	761139	C	T	H445Y
RIFAMPICIN	rpoB	761139	C	G	H445D
RIFAMPICIN	rpoB	761140	A	T	H445L
RIFAMPICIN	rpoB	761140	A	C	H445P
RIFAMPICIN	rpoB	761140	A	G	H445R
RIFAMPICIN	rpoB	761141	C	A	H445Q
RIFAMPICIN	rpoB	761141	C	G	H445Q
RIFAMPICIN	rpoB	761142	A	C	K446Q
RIFAMPICIN	rpoB	761144	G	T	K446N
RIFAMPICIN	rpoB	761144	G	C	K446N
RIFAMPICIN	rpoB	761146	G	A	R447H
RIFAMPICIN	rpoB	761146	G	C	R447P
RIFAMPICIN	rpoB	761155	C	T	S450L
RIFAMPICIN	rpoB	761155	C	G	S450W
RIFAMPICIN	rpoB	761161	T	C	L452P
RIFAMPICIN	rpoB	761166	C	T	P454S
RIFAMPICIN	rpoB	761167	C	A	P454H
RIFAMPICIN	rpoB	761167	C	T	P454L
RIFAMPICIN	rpoB	761167	C	G	P454R
RIFAMPICIN	rpoB	761176	T	C	L457P

RIFAMPICIN	rpoB	761185	A	G	E460G
RIFAMPICIN	rpoB	761196	C	A	L464M
RIFAMPICIN	rpoB	761220	T	G	S472A
RIFAMPICIN	rpoB	761244	A	G	I480V
RIFAMPICIN	rpoB	761245	T	C	I480T
RIFAMPICIN	rpoB	761248	A	G	E481G
RIFAMPICIN	rpoB	761250	A	C	T482P
RIFAMPICIN	rpoB	761254	C	T	P483L
RIFAMPICIN	rpoB	761274	C	G	L490V
RIFAMPICIN	rpoB	761277	A	T	I491F
RIFAMPICIN	rpoB	761284	C	T	S493L
RIFAMPICIN	rpoB	761460	C	T	R552C
RIFAMPICIN	rpoB	761582	G	T	E592D
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ISONIAZID	katG	2155206	G	T	S302R
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ISONIAZID	katG	2155356	A	T	F252L
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ISONIAZID	katG	2155358	A	G	F252L
ISONIAZID	katG	2155360	G	A	T251M
ISONIAZID	katG	2155367	G	A	R249C
ISONIAZID	katG	2155385	C	A	A243S
ISONIAZID	katG	2155398	G	T	N238K
ISONIAZID	katG	2155398	G	C	N238K
ISONIAZID	katG	2155405	T	G	N236T
ISONIAZID	katG	2155411	C	T	G234E
ISONIAZID	katG	2155412	C	T	G234R
ISONIAZID	katG	2155412	C	G	G234R
ISONIAZID	katG	2155423	A	G	V230A
ISONIAZID	katG	2155426	T	A	Y229F
ISONIAZID	katG	2155442	G	C	Q224E
ISONIAZID	katG	2155458	G	T	N218K
ISONIAZID	katG	2155458	G	C	N218K

ISONIAZID	katG	2155514	T	A	K200*
ISONIAZID	katG	2155518	C	T	W198*
ISONIAZID	katG	2155519	C	T	W198*
ISONIAZID	katG	2155529	C	T	E195K
ISONIAZID	katG	2155541	A	T	W191R
ISONIAZID	katG	2155541	A	G	W191R
ISONIAZID	katG	2155555	C	A	G186V
ISONIAZID	katG	2155573	G	T	T180K
ISONIAZID	katG	2155584	C	A	M176I
ISONIAZID	katG	2155584	C	T	M176I
ISONIAZID	katG	2155584	C	G	M176I
ISONIAZID	katG	2155597	G	A	A172V
ISONIAZID	katG	2155598	C	T	A172T
ISONIAZID	katG	2155606	C	G	G169A
ISONIAZID	katG	2155628	C	T	A162T
ISONIAZID	katG	2155633	G	A	S160L
ISONIAZID	katG	2155648	T	C	Y155C
ISONIAZID	katG	2155648	T	G	Y155S
ISONIAZID	katG	2155669	A	C	L148R
ISONIAZID	katG	2155684	T	G	K143T
ISONIAZID	katG	2155687	T	G	D142A
ISONIAZID	katG	2155689	C	A	L141F
ISONIAZID	katG	2155689	C	G	L141F
ISONIAZID	katG	2155692	G	T	S140R
ISONIAZID	katG	2155692	G	C	S140R
ISONIAZID	katG	2155693	C	T	S140N
ISONIAZID	katG	2155694	T	C	S140G
ISONIAZID	katG	2155694	T	G	S140R
ISONIAZID	katG	2155697	C	G	A139P
ISONIAZID	katG	2155699	T	C	N138S
ISONIAZID	katG	2155699	T	G	N138T
ISONIAZID	katG	2155700	T	C	N138D
ISONIAZID	katG	2155700	T	G	N138H
ISONIAZID	katG	2155729	C	G	R128P
ISONIAZID	katG	2155732	T	G	Q127P
ISONIAZID	katG	2155734	C	A	M126I
ISONIAZID	katG	2155734	C	T	M126I
ISONIAZID	katG	2155734	C	G	M126I
ISONIAZID	katG	2155739	C	A	G125C
ISONIAZID	katG	2155750	C	A	G121V
ISONIAZID	katG	2155751	C	A	G121C
ISONIAZID	katG	2155762	T	G	D117A
ISONIAZID	katG	2155783	G	A	A110V
ISONIAZID	katG	2155786	G	A	A109V
ISONIAZID	katG	2155788	G	T	H108Q
ISONIAZID	katG	2155788	G	C	H108Q
ISONIAZID	katG	2155790	G	C	H108D
ISONIAZID	katG	2155791	C	T	W107*
ISONIAZID	katG	2155792	C	T	W107*
ISONIAZID	katG	2155793	A	T	W107R
ISONIAZID	katG	2155793	A	G	W107R

ISONIAZID	katG	2155795	G	A	A106V
ISONIAZID	katG	2155801	C	A	R104L
ISONIAZID	katG	2155801	C	T	R104Q
ISONIAZID	katG	2155816	C	T	G99E
ISONIAZID	katG	2155826	C	A	G96C
ISONIAZID	katG	2155831	T	C	D94G
ISONIAZID	katG	2155831	T	G	D94A
ISONIAZID	katG	2155841	A	T	W91R
ISONIAZID	katG	2155841	A	G	W91R
ISONIAZID	katG	2155842	C	T	W90*
ISONIAZID	katG	2155843	C	T	W90*
ISONIAZID	katG	2155849	T	C	Q88R
ISONIAZID	katG	2155859	T	G	T85P
ISONIAZID	katG	2155860	C	A	M84I
ISONIAZID	katG	2155860	C	T	M84I
ISONIAZID	katG	2155860	C	G	M84I
ISONIAZID	katG	2155891	T	C	D74G
ISONIAZID	katG	2155892	C	A	D74Y
ISONIAZID	katG	2155897	T	C	D72G
ISONIAZID	katG	2155900	A	T	I71N
ISONIAZID	katG	2155916	C	G	A66P
ISONIAZID	katG	2155919	C	T	A65T
ISONIAZID	katG	2155923	G	T	D63E
ISONIAZID	katG	2155923	G	C	D63E
ISONIAZID	katG	2155931	C	T	A61T
ISONIAZID	katG	2155969	A	T	L48Q
ISONIAZID	katG	2155998	C	T	W38*
ISONIAZID	katG	2155999	C	T	W38*
ISONIAZID	katG	2156009	T	C	N35D
ISONIAZID	katG	2156056	C	T	G19D
ISONIAZID	katG	2156062	C	T	S17N
ISONIAZID	katG	2156078	T	G	T12P
ISONIAZID	katG	2156081	T	C	T11A
ISONIAZID	katG	2156108	G	A	P2S
ISONIAZID	katG	2156110	A	G	V1A
ISONIAZID	katG	2156111	C	A	V1L
ISONIAZID	katG	2156111	C	G	V1L
ISONIAZID	katG_promoter	2156118	C	T	C-7T
ISONIAZID	katG_promoter	2156121	T	G	T-10G
ISONIAZID	katG_promoter	2156123	C	T	C-12T
ISONIAZID	inhA	1674434	T	C	V78A

Supplementary Table 3. The 1,468 MDR-TB strains that were included in study.

Strain ID	Rifampicin	Isoniazid	Country origin	Reference
2009_0645	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_0647	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_0994	rpoB_S450L	fabG1_promoter_C1673425T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1011	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1058	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1060	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1098	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1121	rpoB_L430P,rpoB_H445Q	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_116	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1161	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1303	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1333	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1413	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1543	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1578	rpoB_S450L	ahpC_promoter_C2726141T,fabG1_promoter_C1673425T, katG_promoter_T2156121G	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1585	rpoB_D435V	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1687	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1780	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1862	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1924	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1928	rpoB_H445N	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_1994	rpoB_H445N	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_294	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_295	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_511	rpoB_Q432P	fabG1_promoter_C1673425T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_620	rpoB_L430P,rpoB_Q432P	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_643	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_682	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_716	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_783	rpoB_L430P,rpoB_D435G	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_784	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_799	rpoB_D435V	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_817	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_956	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0020	rpoB_L430P,rpoB_S431G	katG_S315T, fabG1_promoter_T1673432C	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0208	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0560	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0614	rpoB_H445Y	ahpC_promoter_G2726145A	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0757	rpoB_L430P,rpoB_D435G	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0768	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0841	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_0888	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1007	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1180	rpoB_H445R	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_122	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1232	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1603	rpoB_S450W	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1628	rpoB_D435Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1647	rpoB_D435V	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1730	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1753	rpoB_L430P,rpoB_Q432P	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1770	rpoB_A286V,rpoB_S450L	katG_S315T, fabG1_promoter_T1673432C	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_1781	rpoB_L430P,rpoB_P454H	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2010_183	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.

2012_1655	rpoB_S450L,rpoB_I480V	fabG1_promoter_C1673425T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2012_1810	rpoB_S450L	fabG1_promoter_C1673425T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2012_1813	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2012_1828	rpoB_L430P,rpoB_S431G	katG_S315T,fabG1_promoter_T1673432C	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2012_2121	rpoB_H445Y	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2012_2164	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_4	rpoB_H445D	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
2009_7	rpoB_S450L	katG_S315T	China	Yang, C, et al. <i>The Lancet Infectious Diseases</i> 17.3 (2017): 275-284.
SRR671719	rpoB_L452P	katG_S315N	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671720	rpoB_H445L	fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671721	rpoB_D435G,rpoB_H445D	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671722	rpoB_S450L	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671724	rpoB_S450L	fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671725	rpoB_S450L	katG_S315N	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671726	rpoB_S450L	ahpC_promoter_G2726119A	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671731	rpoB_H445D	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671732	rpoB_S450L	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671733	rpoB_L452P	katG_S315N	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671734	rpoB_H445D	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671735	rpoB_S450L	fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671736	rpoB_S450L	katG_W191R,fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671737	rpoB_S450L	ahpC_promoter_G2726145A	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671738	rpoB_Q429H,rpoB_H445Y	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671739	rpoB_H445D	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671740	rpoB_H445Y	katG_V1A	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671742	rpoB_H445D	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671743	rpoB_S450L	fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671744	rpoB_S450L	katG_W191R,fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671745	rpoB_H445Y	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671746	rpoB_H445Y	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671748	rpoB_L430R,rpoB_D435G	katG_S315N	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671749	rpoB_H445R	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671751	rpoB_H445R	katG_S315T,fabG1_promoter_T1673432C	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671752	rpoB_D435Y	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671753	rpoB_S450L	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671754	rpoB_S450L	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671755	rpoB_S450L	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671758	rpoB_H445R	ahpC_promoter_C2726141T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671759	rpoB_D435Y,rpoB_H445D	katG_S315T,fabG1_promoter_T1673432C	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671760	rpoB_D435G,rpoB_L452P	katG_D419H	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671761	rpoB_H445Y,rpoB_E460G	inhA_S94A, katG_S315T, fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671765	rpoB_S441L	katG_S315T,fabG1_promoter_T1673432C	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671766	rpoB_S450L	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671768	rpoB_S450L	katG_S315N	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671769	rpoB_H445D	katG_Y155C	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671770	rpoB_V170F	katG_L378P	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671771	rpoB_L452P	katG_S315T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671774	rpoB_H445D	katG_Y155C	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.
SRR671779	rpoB_S450L	katG_S315T,fabG1_promoter_C1673425T	China	Zhang, H, et al. <i>Nature genetics</i> 45.10 (2013): 1255-1260.

SRR671781	rpoB_S450L	katG_W191R,inhA_I19 4T,fabG1_promoter_C 1673425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671785	rpoB_D435G,rpoB_L452P	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671787	rpoB_H445Y	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671789	rpoB_H445L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671791	rpoB_D435V	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671794	rpoB_D435G,rpoB_L452P	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671795	rpoB_F424L,rpoB_L430P	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671796	rpoB_S450L	fabG1_promoter_C167 3425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671797	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671798	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671799	rpoB_S450L	fabG1_promoter_C167 3425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671801	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671804	rpoB_D435A,rpoB_L452P	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671806	rpoB_L452P	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671807	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671809	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671810	rpoB_H445F	katG_S315N	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671811	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671812	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671815	rpoB_S450L	katG_S315T,fabG1_pro moter_T1673432G	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671816	rpoB_H445D	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671817	rpoB_H445D	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671818	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671819	rpoB_T427P,rpoB_L430P	katG_W191R,fabG1_pr omoter_C1673425T,ah pC_promoter_G27261 45A	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671820	rpoB_H445D	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671821	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671822	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671824	rpoB_S450L,rpoB_P454L	fabG1_promoter_C167 3425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671825	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671826	rpoB_S450L	katG_T380I,ahpC_pro moter_C2726139T,fab G1_promoter_C16734 25T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671828	rpoB_H445D	katG_N138D,fabG1_pr omoter_T1673432A	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671829	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671831	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671834	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671837	rpoB_S450L	katG_S315T,ahpC_pro moter_C2726141T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671838	rpoB_D435V	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671839	rpoB_H445Y	katG_S315T,fabG1_pro moter_T1673432A	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671840	rpoB_H445Y	katG_S315N	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671841	rpoB_H445N,rpoB_P454L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671843	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671844	rpoB_S450L	katG_S315T, katG_S315 R, katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671848	rpoB_H445Y	katG_W191R,fabG1_pr omoter_C1673425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671849	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671850	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671851	rpoB_L430P,rpoB_S431G	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671852	rpoB_H445Y	fabG1_promoter_C167 3425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671854	rpoB_S441L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671855	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671857	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671861	rpoB_S450L	katG_S315N	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.

SRR671862	rpoB_S450L	katG_S315N	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671863	rpoB_H445L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671864	rpoB_H445L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671865	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671866	rpoB_S450L	katG_S315T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671867	rpoB_D435V	katG_Y155C,fabG1_promoter_C1673425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671868	rpoB_S450L	fabG1_promoter_C1673425T	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
SRR671869	rpoB_H445N	katG_S315G	China	Zhang, H, et al. Nature genetics 45.10 (2013): 1255-1260.
ERR550764	rpoB_S450L	katG_S315T	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR551236	rpoB_S450L	katG_S315T	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552090	rpoB_S450L	katG_S315T	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552326	rpoB_S450L	katG_S315T, katG_I335V	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552391	rpoB_S450L	katG_S315T	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552539	rpoB_L452P	katG_S315T	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR551957	rpoB_S450L	katG_S315T, katG_I335V	German	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR036188	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR037486	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR1063841	rpoB_S450L	inhA_I194T, fabG1_promoter_C1673425T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR1063848	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR1063850	rpoB_D435V	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR1063861	rpoB_H445N, rpoB_E460G	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR1063895	rpoB_H445Y	katG_S315T, fabG1_promoter_C1673425T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR161085	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR163953	rpoB_D435V	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR163958	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR163962	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR176629	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR181793	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR181861	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR181930	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR181933	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR181986	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR190370	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR212021	rpoB_S450L	kasA_G269S, katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR212054	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR221596	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR221616	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR221617	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR221618	rpoB_S450L	katG_S315T	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR245651	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR245670	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR245829	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR245836	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR473327	rpoB_D435G, rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR736807	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR736820	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR773802	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
ERR779679	rpoB_H445N	inhA_S94A	Malawi	Guerra-Assunção, J. A., et al. Elife 4 (2015): e05166.
SRS485049	rpoB_S450L	inhA_V78A, katG_S315I	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485073	rpoB_L452P	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485074	rpoB_S450L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485075	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485076	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485077	rpoB_S450L	inhA_I21T, fabG1_promoter_C1673425T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485078	rpoB_L452P	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485079	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.

SRS485080	rpoB_L452P	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485083	rpoB_S450L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485085	rpoB_H445D	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485086	rpoB_D435V	inhA_S94A, katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485087	rpoB_H445D	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485088	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485089	rpoB_S450L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485090	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485092	rpoB_D435V	katG_S315T, fabG1_promoter_T1673432C	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485093	rpoB_S450L	fabG1_promoter_C1673425T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485094	rpoB_H445D	katG_S315T, fabG1_promoter_T1673432C	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485095	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485096	rpoB_H445Q, rpoB_L452P	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485097	rpoB_H445D	katG_S315T, fabG1_promoter_T1673432C	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485098	rpoB_D435E, rpoB_S441L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS485099	rpoB_S450L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526835	rpoB_H445L	katG_S315T, fabG1_promoter_T1673432C	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526842	rpoB_D435F	inhA_V78A, katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526897	rpoB_S450L	katG_W328L	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526924	rpoB_D435V	katG_S315T, fabG1_promoter_T1673432C	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526927	rpoB_S450L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526934	rpoB_H445D	katG_S315T, fabG1_promoter_T1673432C	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526977	rpoB_S450L	katG_S315T, fabG1_promoter_C1673425T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS526988	rpoB_H445R	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS703247	rpoB_S450L	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS703250	rpoB_D435V	katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
SRS703269	rpoB_S450L	inhA_V78A, katG_S315T	Mali	Winglee, K, et al. PLoS neglected tropical diseases 10.1 (2016): e0004332.
ERR024350	rpoB_S450L	katG_S315T	Netherlands	Bryant, J.M., et al. BMC infectious diseases 13.1 (2013): 110.
ERR024351	rpoB_S450L	katG_S315T	Netherlands	Bryant, J.M., et al. BMC infectious diseases 13.1 (2013): 110.
ERR015610	rpoB_S450L	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR015611	rpoB_S450L	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR015614	rpoB_S450L	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR015616	rpoB_L430P, rpoB_S431G, rpoB_H445Q	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047880	rpoB_S450L	katG_S315T, fabG1_promoter_C1673425T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047881	rpoB_S450L	kasA_G269S, katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047882	rpoB_H445Y	katG_S315T, fabG1_promoter_T1673432C	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047883	rpoB_S450L	kasA_G269S, katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047884	rpoB_S450L	katG_S315T, fabG1_promoter_C1673425T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047885	rpoB_H445Y	katG_S315T, fabG1_promoter_T1673432C	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047886	rpoB_L452P	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047887	rpoB_H445Y	katG_S315T, fabG1_promoter_T1673432C	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047888	rpoB_H445Y	katG_S315T, fabG1_promoter_T1673432C	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047889	rpoB_H445Y	katG_S315T, fabG1_promoter_T1673432C	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047890	rpoB_H445Y	katG_S315T, fabG1_promoter_T1673432C	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR047891	rpoB_L452P	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR067576	rpoB_S450L	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR067577	rpoB_S450L	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.
ERR067578	rpoB_S450L	katG_S315T	Russia	Casali, N, et al. Nature genetics 46.3 (2014): 279-286.

SRR1062841	rpoB_S450L	katG_S315T,fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062842	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062843	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062844	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062845	rpoB_S450L	inhA_I194T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062846	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062847	rpoB_S450L	kasA_G269S, katG_S315T, ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062848	rpoB_D435V	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062849	rpoB_S450L	inhA_I194T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062850	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062851	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062852	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062853	rpoB_S450L	inhA_I194T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062854	rpoB_S450L	kasA_G269S, katG_S315T, ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062855	rpoB_S450W	kasA_G269S, katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1062856	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140898	rpoB_L430P	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140899	rpoB_S450L	inhA_I21T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140901	rpoB_Q429H,rpoB_D435Y	ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140916	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140924	rpoB_S450L	inhA_I21T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140926	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140929	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140930	rpoB_L430P	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140932	rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140934	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140936	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140938	rpoB_D435Y	katG_S315T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140941	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140943	rpoB_H445L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140944	rpoB_L430P,rpoB_D435Y	kasA_G269S, katG_S315T, ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140945	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140946	rpoB_S450L	kasA_G269S, katG_S315T, ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140947	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140949	rpoB_I491F	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140951	rpoB_S450L	katG_S315T, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR1140952	rpoB_H445G	katG_D419H, fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.

SRR847798	rpoB_S450W	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR847799	rpoB_D435V	katG_S315T,fabG1_promoter_G1673423T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR847800	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR847801	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR847802	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR847803	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924205	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924206	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924210	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924211	rpoB_L452P	katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924212	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924214	rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924219	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924224	rpoB_S450L	kasA_G269S, katG_S315T, ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924225	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924226	rpoB_D435G,rpoB_L452P	katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924227	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924231	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924232	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924233	rpoB_S450L	kasA_G269S, katG_S315T, ahpC_promoter_C2726141T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924234	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924240	rpoB_S450L	katG_S315T	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924692	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924694	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924696	rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR924697	rpoB_D435G,rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR958195	rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Cohen, K.A., et al. PLoS medicine 12.9 (2015): e1001880.
SRR2101307	rpoB_H445D	katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101344	rpoB_D435V	katG_S315T, fabG1_promoter_G1673423T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.

SRR2101373	rpoB_S450L	inhA_S94A	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101384	rpoB_S450L	katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101460	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101470	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101482	rpoB_H445Y	katG_S315T, fabG1_promoter_C1673425T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101505	rpoB_S450L	katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101539	rpoB_L452P	kasA_G269S, katG_S315T, fabG1_promoter_T1673432A	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101574	rpoB_H445Y	katG_S315T, fabG1_promoter_C1673425T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101686	rpoB_L430P	kasA_G269S, katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101690	rpoB_F433L, rpoB_M434I, rpoB_D435H	katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101731	rpoB_S450L	katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101757	rpoB_S450L	inhA_I194T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101763	rpoB_S450L	inhA_I194T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2101806	rpoB_H445D	katG_S315T	South Africa	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR970445	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Black, P. A., et al. BMC genomics 16.1 (2015): 857.
ERR970447	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Black, P. A., et al. BMC genomics 16.1 (2015): 857.
ERR972795	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Black, P. A., et al. BMC genomics 16.1 (2015): 857.
ERR983252	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Black, P. A., et al. BMC genomics 16.1 (2015): 857.
ERR983253	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Black, P. A., et al. BMC genomics 16.1 (2015): 857.
ERR983254	rpoB_S450L	fabG1_promoter_C1673425T	South Africa	Black, P. A., et al. BMC genomics 16.1 (2015): 857.
ERR550665	rpoB_S450L	katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR551126	rpoB_S450L	katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR551513	rpoB_S450L	katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR551620	rpoB_D435Y	ahpC_promoter_G2726119A	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552260	rpoB_D435Y	kasA_G269S, katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552662	rpoB_S450L	katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552979	rpoB_S450L	katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553000	rpoB_H445Y	inhA_V78A, katG_S315T, ahpC_promoter_C2726141T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553037	rpoB_H445Y	katG_S315T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553226	rpoB_S450L	ahpC_promoter_C2726112T	Sierra Leone	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR464719	rpoB_H445Y	katG_S315T	Switzerland	Bryant, J.M., et al. BMC infectious diseases 13.1 (2013): 110.
ERR464729	rpoB_D435Y	katG_S315N	Switzerland	Bryant, J.M., et al. BMC infectious diseases 13.1 (2013): 110.
ERR464730	rpoB_D435Y	katG_S315N	Switzerland	Bryant, J.M., et al. BMC infectious diseases 13.1 (2013): 110.
SRR2100131	rpoB_L452P	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100132	rpoB_L452P	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR046786	rpoB_I491F	katG_V473F	UK	Walker, T.M., et al. The Lancet infectious diseases 13.2 (2013): 137-146.
ERR046796	rpoB_L452P	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 13.2 (2013): 137-146.
ERR046821	rpoB_L452P	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 13.2 (2013): 137-146.
ERR046855	rpoB_H445Y	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 13.2 (2013): 137-146.
ERR046903	rpoB_L452P	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 13.2 (2013): 137-146.
ERR046933	rpoB_V170F	inhA_S94A	UK	Walker, T.M., et al. The Lancet infectious diseases 13.2 (2013): 137-146.
SRR2100176	rpoB_H445N	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100228	rpoB_D435Y	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100231	rpoB_S450L	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100234	rpoB_H445D	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100238	rpoB_S450L	fabG1_promoter_C1673425T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100246	rpoB_S450L	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100250	rpoB_H445Y	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
SRR2100257	rpoB_S450L	katG_S315T	UK	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.

ERR552931	rpoB_D435V	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552940	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552950	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552955	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552978	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR552982	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553023	rpoB_S450L	kasA_G269S, katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553051	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553098	rpoB_S450L	katG_S315N	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553153	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553163	rpoB_S450W	katG_S315N	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553169	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553179	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553180	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553184	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553188	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553192	rpoB_D435V	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553194	rpoB_S450L	katG_S315T, fabG1_promoter_T1673432C	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553198	rpoB_S450L	katG_G297V	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553217	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553246	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.
ERR553394	rpoB_S450L	katG_S315T	Uzbekistan	Walker, T.M., et al. The Lancet infectious diseases 15.10 (2015): 1193-1202.

Supplementary table 4. Putative compensatory mutations in *rpoA*, *rpoB* and *rpoC* genes identified in this study and in comparison with previous studies

Gene	Polymorphism	Hit number	Independent events (NJ)	Independent events (ML)	Comas et al	de Vos et al	Casali et al	Song et al	Cohen et al
rpoA	G31S	4	3	3			yes [^]		yes
rpoA	R182L	5	2	2	yes				
rpoA	T181A	2	2	2	yes		yes		
rpoA	T187A	23	8	8	yes*		yes [^]		yes
rpoA	T187P	3	3	3	yes*		yes [^]		
rpoA	V183G	12	5	5	yes		yes		yes
rpoB	A451V	3	2	2					
rpoB	E481A	3	2	2					
rpoB	E761D	216	4	6			yes		
rpoB	F503S	5	2	2	yes			yes	
rpoB	H835R	5	3	3			yes [^]		
rpoB	I488V	17	2	2			yes		
rpoB	I491V	3	3	3			yes [^]		
rpoB	L731P	6	3	3			yes		
rpoB	M434V	3	2	2					
rpoB	P45L	4	2	2					yes
rpoB	P45R	2	2	2					
rpoB	P45S	5	5	5			yes		
rpoB	R219C	2	2	2					
rpoB	R827C	9	3	3	yes				yes
rpoB	S874Y	2	2	2					
rpoB	T676P	2	2	2					
rpoC	A521D	2	2	2	yes		yes [^]		
rpoC	D485N	24	6	6	yes*		yes [^]		
rpoC	D485Y	5	4	4	yes		yes [^]		
rpoC	D747A	6	2	2			yes		
rpoC	E1033K	2	2	2					
rpoC	E750Q	5	2	2					
rpoC	F452C	2	2	2	yes		yes		
rpoC	G332C	2	2	2			yes [^]		
rpoC	G332R	9	6	6	yes		yes [^]		
rpoC	G332S	2	2	2	yes		yes [^]		yes
rpoC	G433S	6	5	5	yes		yes [^]		
rpoC	G519D	4	4	4	yes		yes [^]		
rpoC	G519R	2	2	2					
rpoC	H525Q	7	4	4	yes	yes			yes
rpoC	I491V	22	14	13	yes*	yes#			yes
rpoC	I885V	6	3	3	yes				yes
rpoC	K445R	21	6	6			yes [^]		
rpoC	L449V	12	5	5	yes		yes [^]		
rpoC	L516P	7	5	5	yes		yes		
rpoC	L527V	19	4	4	yes		yes [^]		
rpoC	N416S	3	3	3	yes			yes	
rpoC	N698H	5	3	3	yes*	yes			
rpoC	N698K	5	4	4	yes*				yes
rpoC	N698S	80	7	7	yes*	yes			
rpoC	N826K	3	2	2	yes				yes
rpoC	P1040R	4	4	4	yes	yes			yes
rpoC	P1040S	28	8	8	yes				yes
rpoC	P434Q	3	3	3			yes [^]		
rpoC	P434R	4	2	2	yes*		yes [^]		
rpoC	Q1125H	2	2	2	yes				yes
rpoC	R459W	2	2	2					yes
rpoC	T825A	2	2	2					
rpoC	V1252L	15	5	5	yes	yes#			yes
rpoC	V431M	9	5	5			yes [^]		
rpoC	V483A	22	13	13	yes*	yes	yes [^]		

rpoC	V483G	55	26	26	yes*	yes#	yes^	yes	yes
rpoC	V517L	3	2	2	yes		yes^		
rpoC	W484G	13	9	9	yes		yes^		

*: these mutations have effect on protein function using SIFT scores and competitive experiment

#: these mutations evolved independently in phylogenetically distant strain families as defined by spoligotyping

^: these mutations emerged independently multiple times in isolates with RRDR mutations

Supplementary Table 5. Comparison of ratios of compensatory mutations in clustered and non-clustered MDR-TB strains without excluding M type clusters.

Groups	Total	With CMs	Without CMs	χ^2	P value
Clustered MDR-TB	94	42 (44.7%)	52 (55.3%)	4.557	0.033
Non-clustered MDR-TB	133	41 (30.8%)	92 (69.2%)		

CMs: Compensatory mutations