

Ethambutol resistance phenotype	Nb of isolates	Phylogenetic lineage	Treatment history^a	Country of birth^b	Resistance patterns^c
S (n=60)	3	T	0	NA	H, S
			NA	NA	-
	2	T1	0	Angola	R, H
			NA	Morocco	-
	3	Cameroon	0	France	-
			0	NA	R, H
	7	LAM	NA	India	-
			NA	Moldova	-
			1	Portugal	R, H, S
			NA	Ivory Coast	H, S
			0	Benin	H, S
			NA	Morocco	-
			1	Morocco	-
	1	Ural	1	NA	-
			1	R Congo	-
	1	S	1	Green Cape	R, H
	3	Uganda	1	Algeria	R, H, S
			0	R Congo	R, H
			NA	Ivory Coast	H
	1	S	NA	Tunisia	-
			0	Pakistan	R, H, Ofx
	1	LAM	1	Senegal	H
	10	Beijing	0	Madagascar	R
0			Moldova	R, H, S	
0			Algeria	H, S	
1			Vietnam	H, S	
NA			NA	-	
0			France	-	

		NA	NA	-
		NA	Madagascar	R
		0	China	R
		NA	Chechnya	H, S
1	Beijing	NA	NA	-
14	Haarlem	1	NA	R
		NA	NA	R
		0	Haiti	-
		1	Romania	H, S
		0	Madagascar	-
		1	France	R, H
		0	France	-
		NA	NA	-
		0	France	-
		0	Romania	S
		NA	NA	-
		NA	Sudan	-
		NA	Cameroon	-
		0	Senegal	-
2	Ghana	0	Ivory Coast	R, H, S, Ofx
		1	Ivory Coast	R, H
2	T3 variant	0	Angola	R, H
		0	R Congo	R, H
1	T3 variant	1	Angola	R, H
1	T2	NA	France	-
1	X	0	Cameroon	R, H, S
1	Haarlem	0	France	-
2	Delhi/CAS	NA	Turkey	-
		NA	Pakistan	-
1	Cameroon	0	Senegal	R, H, S
1	West africanum 2	0	Guinea	-
1	<i>M. bovis</i>	0	Mali	-

R (n=71)	3	Beijing	0	China	R, H, S
			1	Tibet	R, H, S
			0	Tibet	R, H, S
	14	Beijing	NA	Portugal	R, H, Ofx, Km, Am, Cm
			1	Georgia	R, H, S, Km
			0	Georgia	R, H, Ofx
			1	Georgia	R, H, S, Ofx
			0	Ukraine	R, H, S
			1	Georgia	R, H, S, Ofx, Km, Am, Cm
			1	NA	R, H, S, Km, Am, Cm
			1	France	R, H, S
			0	Mongolia	R, H, S
			0	Russia	R, H, S
			0	Tibet	R, H, S
			1	Russia	R, H, S, Km, Am, Cm
			0	China	R
			0	Mongolia	R, H, S
	1	Chechnya	R, H, Ofx		
	3	LAM	0	Vietnam	H, S
			0	DR Congo	R, H, S
	5	Beijing	0	Central Africa	R, H, S
			0	Peru	H, S
			0	Chad	R, H
			0	Sudan	R, H, S
			1	Georgia	R, H, S, Km
			0	Chechnya	R, H, S, Km, Am, Cm
			0	Georgia	R, H, S, Km
			0	Georgia	R, H, S, Ofx
			1	China	R, H, S, Km, Am, Cm
			3	Haarlem	0
	1	Ivory Coast			R, H, S
	1	Tunisia			R, H

1	T1	1	France	R, H
1	T2	1	Cameroon	R, H, S
5	LAM	1	Georgia	R, H, S, Ofx
		0	Moldova	R, H, S
		0	DR Congo	R, H
		1	Peru	R, H, S
		0	Morocco	R, H, S
1	Ghana	1	France	R, H, S
1	Beijing	0	West Indies	R, H, S
1	Beijing	1	Azerbaijan	R, H, S, Ofx
1	LAM	1	Georgia	R, H, S
1	Haarlem	1	NA	R, H
3	Beijing	0	Russia	R, H
		0	France	R, H, S, Ofx
		0	DR Congo	R, H, S, Km, Am, Cm
1	LAM	0	Georgia	R, H, S, Ofx, Cm
1	Beijing	1	Georgia	R, H, S, Ofx, Km, Cm
1	Cameroon	0	Benin	R, H
1	Ural	1	Russia	R, H, S
1	Beijing	1	Ukraine	R, H, S, Ofx, Km
1	Ural	1	Russia	R, H, S, Km, Am, Cm
1	Beijing	0	Chechnya	R, H, Km, Am, Cm
1	Ural	0	France	R, H
3 ^d	Beijing	0	Armenia	R, H, S
		0	Armenia	R, H, S
		0	Armenia	R, H, S
1	X	1	Georgia	R, H, S
1	Beijing	NA	Armenia	R, H, S, Ofx, Km
1	Beijing	0	Chechnya	R, H, S
1	LAM	1	Georgia	R, H, S, Ofx, Km
1	Beijing	1	Armenia	R, H, S, Km
1	Delhi/CAS	NA	Georgia	R, H, Ofx

1	Beijing	1	Armenia	R, H, S, Ofx
3 ^d	Beijing	0	Georgia	R, H, S, Ofx, Km, Cm
		1	Georgia	R, H, S, Ofx, Km, Am, Cm
		1	Russia	R, H, S, Ofx
1	Haarlem	1	Romania	R, H, Km, Am, Cm
1	Uganda	NA	Croatia	R, H, S
1	NEW-1	0	China	R, H, S

TABLE S1 Molecular and epidemiological characteristics of the 60 ETB-S and 71 ETB-R isolates of MTBC

^a 0 = no treatment history, 1 = treatment history, ? = unknown, NA = not available

^b R Congo = Republic of the Congo, DR Congo = Democratic Republic of the Congo, NA = not available

^c Antibiotics: R = rifampicin, H = isoniazid, S = streptomycin, Ofx = ofloxacin, Km = kanamycin, Am = amikacin, Cm = capreomycin, - = no associated resistance

^d Isolates sharing identical MIRU codes and spoligotypes

Resistance gene	Primer ^a	Sequence (5'→3')	Hybridization temperature (°C)	PCR product size (bp)	Reference or source
<i>embC</i> (Rv3793)	embC1F	CCC AAC CAG CCC AAT GTT C	64,5	880	16, 20
	embC1R	GGC GGT GTC CAG GAT GTG			
	embC2F	GCT GCA CAT CCT GGA CAC	60	914	16, 20
	embC2R	ACG ACA TTG CCA CCG ATA C			
	embC3.1F	GTA TCG GTG GCA ATG TCG T	60	623	16
	embC3.1R	CAG CCC GCA GGT CTT GCC			
embC3.2F	GTA CCC GGC GTG GTC GGT TG	60	622	this study	
embC3.2R	CGG GAT GGC GGA CAG TGG T				
intergenic region <i>embC-embA</i>	<i>embC4F</i>	ACC ACT GTC CGC CAT CCC G	67	635	16, 20
	<i>embC4R</i>	GAC GAC GGC TGC TAG GCG TG			
<i>embA</i> (Rv3794)	embA1F	GTG ACT CGC AGC GGG CTG TG	68	1223	16, 20
	embA1R	CGG TGA ACA CAG CGA CCC GG			
	embA2F'	CGG CGT TGT CGC TGA TCA CC	60	800	this study
	embA2R	TCA GGT TGG CCT TGG CGG TG			
<i>embA-embB</i>	embAB F	CTG GTG GTC GCG GTG ATC AT	64	907	16, 20
	embAB 2F	ACG GTC GCT GGC AGG GGA AGT T			
	embAB 2R	CGC CTA TGA CCC GAA CCT GAG	60	787	20
	embAB R	AAT TGG CGT CCT TGC CTT			
<i>embB</i> (Rv3795)	<i>embB1F</i>	GGT GCG CGC CAT GCC ACC	68	803	16
	<i>embB1R</i>	GGT CTG GCA GGC GCA TCC			
	<i>embB2g</i>	CTT CGG CTG GTA TTA CAA CCT G	60	812	this study
	<i>embB2h</i>	CGA ACA GCC CGA AGT GGT GC			
	embB3F	GGC TGA TGG GCG TCA TCT	63	497	16
	embB3R	GGA CCA GCC GTT GGA GTA GGT C			
	embB4F	CCC GAC CTA CTC CAA CGG C	66	1195	16
	embB4R	TGG TGC ATA CCG AGC AGC AT			

<i>embR</i> (Rv1267c)	embR1F	CGA TCA CCA CAG CGG GCA GCA GC	62	896	16
	embR1R	GTT CGA ATG TCA GAG CCT CG			16
	embR2F	CGA GGC TCT GAC ATT CGA AC	62	898	16
	embR2R	GCC GAG ACT ATC AAC AAC GG			16

TABLE S2 Oligonucleotide primers used in PCR and DNA sequencing

^a In *italics* are primers encompassing the “hot spot” of the *embCAB* locus (EmbB codons 306, 406, and 497 and intergenic zone *embC-embA*)