

# Characterization of *Mycobacterium orygis* as *M. tuberculosis* Complex Subspecies

## Technical Appendix



Technical Appendix Figure. Colony morphology of *Mycobacterium orygis* on Stonebrink medium.

Technical Appendix Table 1. Molecular typing results in characterization of *Mycobacterium orygis* as *M. tuberculosis* complex subspecies\*

Strain no.	Origin of sample	mmpL6 codon	RD regions																	RDory x1	RDory x4	wag22
			RD1	RD2	RD3	RD4	RD5a Rv2348	RD5b plcA	RD6	RD7	RD8	RD9	RD10	RD11	RD12† Oryx	RD13	RD14	RD15	RD16			
01-2263	Human, LN	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	ND	ND
97-2150†	Human, P	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
00-1215†	Human, P	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	ND	0
97-176†	Human, P	AAG	1	1	0	1	0	0	1	0	0	0	0	0	0	1	1	1	1	0	ND	0
07-1275	Human, P	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
07-775	Human, P	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
03-1265	Human, LN	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
94-988† & 94-931†	Human, LN	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	ND	0
08-564	human, G	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
02-658	Human, P	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
17263	Antelope, SA (3)	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
17297	Unspecified	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
17783	Antelope, NL	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
17786	Waterbuck, NL	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
17788	Waterbuck, NL	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
17789	Oryx, NL (3)	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	ND	0
95-114	Waterbuck, NL	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
08-482	Deer, UK	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
10-1561	Cow, BD (10)	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0
10-1563	Monkey, BD	AAG	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	ND	0	0
<i>M. tuberculosis</i> H37Rv	Human, P	AAC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

\*RD, region of difference; ND, not determined; LN, lymph node; P, pulmonary tuberculosis; G, gastric fluid; SA, Saudi Arabia; NL, the Netherlands; UK, United Kingdom; BD, Bangladesh. References in parentheses refer to primary publication of the respective strain.

†These isolates tested negative for nitrate reductase and were tolerant to 5 µg/mL thiophene-2-carboxylic hydrazide.

Technical Appendix Table 2. Functional analysis of genes in the RD12 deletion area of *Mycobacterium orygis*

Locus	Gene name
<i>Rv3125c</i>	PPE family protein
<i>Rv3124</i>	Transcriptional regulator
<i>Rv3123</i>	Hypothetical protein
<i>Rv3122</i>	Hypothetical protein
<i>Rv3121</i>	Cytochrome P450 141 ( <i>cyp141</i> )
<i>Rv3120</i>	Conserved hypothetical protein
<i>Rv3119</i>	Molybdenum cofactor biosynthesis protein E ( <i>moaE1</i> )
<i>Rv3118</i>	Hypothetical protein ( <i>sseC1</i> )
<i>Rv3117</i>	Thiosulfate sulfurtransferase ( <i>cysA3</i> )
<i>Rv3116</i>	Molybdenum cofactor biosynthesis protein ( <i>moaB2</i> )
<i>Rv3115</i>	Transposase
<i>Rv3114</i>	Conserved hypothetical protein
<i>Rv3113</i>	Phosphatase
<i>Rv3112</i>	Molybdenum cofactor biosynthesis protein D ( <i>moaD1</i> )
<i>Rv3111</i>	Molybdenum cofactor biosynthesis protein C ( <i>moaC1</i> )