

## Supplementary 1.

Comparison of the conserved gene between *dtxR*, *pldA*, and *16S rRNA* of *C. ulcerans*.

Nucleotide base mutations of *dtxR* gene of *C. ulcerans*.

Strain	Mutation Position										dtxR type=1
	General (1 clone)										
<i>C. ulcerans</i> FRC58	G	T	C	C	C	A	C	C	A	C	-
<i>C. ulcerans</i> 210951	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> U514b	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 0102	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> BR-A022	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 809	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 210952	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 131001	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 131002	A	-	A	T	A	C	T	G	T	C	-
<i>C. ulcerans</i> FRC11	A	C	A	T	A	C	T	G	T	C	-

Nucleotide base mutations of *pldA* gene of *C. ulcerans*.

Strain	Mutation Position										dtxR type=2
	General (1 clone)										
<i>C. ulcerans</i> FRC58	G	G	C	C	T	G	A	G	A	C	-
<i>C. ulcerans</i> 210951	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 0514b	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 0102	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> BR-A022	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 809	A	-	A	G	G	G	A	C	A	C	-
<i>C. ulcerans</i> 210952	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 131001	-	-	-	-	-	-	-	-	-	-	-
<i>C. ulcerans</i> 131002	-	T	A	T	C	-	C	C	A	G	-
<i>C. ulcerans</i> FRC11	-	A	C	T	C	G	T	G	T	C	-

Nucleotide base mutations of *16S rRNA* gene of *C. ulcerans*.

Strain	Mutation Position										dtxR type=3
	16S rRNA										
<i>C. ulcerans</i> FRC58	G	T	T	T	G	Ins	-	-	-	-	-
<i>C. ulcerans</i> 210951	-	-	-	-	Ins	-	-	-	-	-	-
<i>C. ulcerans</i> 0514b	A	-	-	-	Ins	-	-	-	-	-	-
<i>C. ulcerans</i> 0102	-	-	-	-	Ins	-	-	-	-	-	-
<i>C. ulcerans</i> BR-A022	-	-	-	-	Del	G	Ins	-	-	-	-
<i>C. ulcerans</i> 809	A	-	-	-	Ins	-	-	-	-	-	-
<i>C. ulcerans</i> 210952	-	-	-	-	Ins	-	-	-	-	-	-
<i>C. ulcerans</i> 131001	A	-	-	-	Ins	-	-	-	-	-	-
<i>C. ulcerans</i> FRC11	A	-	-	-	Ins	-	-	-	-	-	-

A=Adenine, T=Thymine, G=Guanine, C=Cytosine, Del=Deletion, Ins=Insertion.

Supplementary 2.

**Comparison of the conserved gene between *dtxR*, *pld*, and 16S rRNA of *C.pseudotuberculosis*.**  
Nucleotide base mutations of *dtxR* gene of *C.pseudotuberculosis*.

A=Adenine, T=Thymine, G=Guanine, C=Cytosine, Del=Deletion, Ins=Insertion.