

Oligonucleotide primers used and PCR cycling conditions for de amplification and sequencing of six housekeeping genes using in the MLST of *Yersinia ruckeri*

Gene	Primer (5'-3')	Length (bp)	PCR cycling	Reference
<i>glnA</i>	Forward: CGATTGGTGGCTGGAAAGGC Reverse: TTGGTCATRGTRTTGAAGCG	530	5 min 94 °C, 35 x (45 s 94 °C, 45 s 51 °C, 1 min 72 °C), 5 min 72 °C	Kotetishvili et al., 2005
<i>gyrB</i>	Forward: CGGCGGTTGCAYGGYGTRGG Reverse: CAGSGTRCGRTCATYGCCG	545	5 min 94 °C, 35 x (45 s 94 °C, 45 s 62 °C, 1 min 72 °C), 5 min 72 °C	Kotetishvili et al., 2005
<i>recA</i>	Forward: GGGCCAAATTGAAAARCARTTCGG Reverse: CGCCRATYTTCATRCGRATYTGGT	560	5 min 94 °C, 35 x (45 s 94 °C, 45 s 51 °C, 1 min 72 °C), 5 min 72 °C	Kotetishvili et al., 2005
<i>dnaJ</i>	Forward: ATGGCGAAGAGAGACTATTAC Reverse: AAGCTTTAGAGCGTGGGTGT	1024	5 min 94 °C, 35 x (45 s 94 °C, 45 s 51 °C, 1 min 72 °C), 5 min 72 °C	Hurst et al., 2010
<i>thrA</i>	Forward: TGACCATGCCGTTAT Reverse: GCTTTGTTGGCGTAC	693	5 min 94 °C, 35 x (45 s 94 °C, 45 s 51 °C, 1 min 72 °C), 5 min 72 °C	Tinsley et al., 2009
Y-HSP60	Forward: GACGTNGTAGAACGGTATGYAG Reverse: CGCCGCCAGCCAGTTAGC	565	5 min 94 °C, 35 x (45 s 94 °C, 45 s 51 °C, 1 min 72 °C), 5 min 72 °C	Kotetishvili et al., 2005

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