**Strains Descriptiona Tn insertion siteb Source**

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*Leptospira interrogans* Wild-type strain (WT)

Serovar Manilae, strain L495

*perRA* (M766) *Himar1* Tn insertion in LIMLP\_10155 (2427923-2428360) 2427985 (1,2)

*perRA::KmR*

Resistance to kanamycin

*perRB* (Man1474)*Himar1* Tn insertion in LIMLP\_05620 (1386251-1386688) 1386423 This study *perRB::KmR*

Resistance to kanamycin

*perRAperRB* allelic exchange of LIMLP\_10155 in the M1474 mutant 1386423 This study

Δ *perRA, perRB::KmR*

Resistance to kanamycin and spectinomycin

*perRB*+*perRB*  Man1474 mutant trans-complemented with the LIMLP\_05620 ORF This study

contains the pNB139 plasmid

Resistance to kanamycin and spectinomycin

Π1 (Δ*thyA*) *Escherichia coli* replicative strain

β2163 (Δ*dapA*) *Escherichia coli* conjugative strain (3)

**S9 Table. Strains used in this study**

a Gene name is according to *Leptospira interrogans* serovar Manilae strain UP-MMC-NIID-LP genome (4).

b Tn position is according to *Leptospira interrogans* serovar Manilae strain UP-MMC-NIID-LP genome (4).

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