

SUPPLEMENTARY TABLES

Table S1. Primers used in this study *

ST-PCR Primers		
Primer	Primer sequence	Target site
P1 ¹	CTCCATCTTTTCAGCTTCAGGCG	mCherry
P2 ¹	GGCCACGCGTCGACTAGTACNNNNNNNNNGATAT	Degenerate primer
P5	AGTCACCATTGTTGTGCACGACGAC	<i>aad</i>
P4 ¹	GGCCACGCGTCGACTAGTAC	Defined primer for P2 nesting
P6	AACCGGCAAATCGCGCCGAA	<i>aad</i> nesting
P3 ¹	GTCTGTGTGCCTTCATACGGTC	mCherry nesting
Screening primers		
Himar1	F: ATCAAGCCTTACGGTCACCG R: ATGGGAACGCGTCATGAACT	<i>aad</i> and mCherry span

Gene Specific Primers	Locus ID	Product size (bp)
F: TGGTCTAATTATAGTGATGCTATGG R: AGTTTCTTTCTAAAACCATTACG	EHF_0231	114
F: ATGGCATCGGGTTGTTGTTTC R: GACTTTACACAATACGCTTGACTT	EHF_0522	468
F: TCCTCCCAGAATTTTCGCACA R: GAATGTTGCTTTAATTCACCAGC	EHF_RS04100	373
F: CACAAAGAAAGCATATAGTGGAGGT R: ACGCATGTATCGTAAATGCATACT	Up EHF_0151	98
F: TCAATATAGAACAACATACTACAAA R: TCTGCTTCATCAGATTCTACT	EHF_0962	421
F: GCACTGATATTATTTGCAGGTACAG R: GCTTTCCTTGTGTTTTGGCTTCAA	EHF_0880	229
F: TCTACTGATTTGTAAACAATGGAT R: TGCAAGTAGTGCTCCTGTTA	EHF_0933	338
F: ACTGCTATAGCTCTTACATTAGTCT R: GGCATAACCATTTACGAAACACA	EHF_0332	150
F: GGATGAACTGGTAGGCAACTGATA R: AATAGAGCAATCAACCCAACGGCT	EHF_0150	466
Insertion Specific Primers		
F: P3 R: TTCCTGACCATTTTGTCTTGCCCA	EHF_0382	549

* Unless cited with a reference, all other primers were designed in this study.

F: P6 R: ACCGGAACTTCCTGCTGCAACG	EHF_0135	427
F: TCCTCCCAGAATTTTCGCACA R: P3	EHF_RS04100	588
F: P6 R: TAGTTTTGTAAGCTGTGCCCCT	EHF_0733	329
F: TCAGAGCAACAACAGCTGCAATCC R: P3	EHF_0758	746
F: ACGCATGTATCGTAAATGCATACT R: P3	EHF_0151	416
F: P6 R: GACTTTACACAATACGCTTGACTT	EHF_0522	970
F: P6 R: ACCTGGAGTGTCAATTCTCTGATCC	EHF_0048	347

qPCR primers		Purpose
Mouse GAPDH ²	F: GTTGTCTCCTGCGACTTCA R: GGTGGTCCAGGGTTTCTTA	GAPDH for normalizing infected mouse tissue
<i>Ehrlichia</i> 16S rRNA ³	F: CGGGGGAAAGATTTATCGCTATTA R: CGCTTGCCCCCTCCGTATTA	Quantifying <i>Ehrlichia</i>
qRT-PCR primers ⁴		
TNF- α	F: CATCTTCTCAAATTCGAGTGACAA R: TGGGAGTAGACAAGGTACAACCC	TNF- α expression
IL-1 β	F: GGGCCTCAAAGGAAAGAATC R: TACCAGTTGGGGAAGTCTGC	IL-1 β expression
IFN- γ	F: GCGTCATTGAATCACACCTG R: TGAGCTCATTGAATGCTTGG	IFN- γ expression
IL-6	F: GAGGATACCACTCCCAACAGACC R: AAGTGCATCATCGTTGTTTCATACA	IL-6 expression
IL-12 <i>p40</i>	F: AAGGAACAGTGGGTGTCCAG R: CATCTTCTTCAGGCGTGTCA	IL-12 β expression
IL-10	F: GGTTGCCAAGCCTTATCGGA R: ACCTGCTCCACTGCCTTGCT	IL-10 expression

References:

- 1) Indukuri, V. (2013). Transposon based mutagenesis and mapping of transposon insertion sites within the *Ehrlichia chaffeensis* genome using semi random two-step PCR. Master of Science Thesis, Kansas State University.
- 2) Prima, V., Kaliberova, L.N., Kaliberov, S., Curiel, D.T., and Kusmartsev, S. (2017). COX2/mPGES1/PGE(2) pathway regulates PD-L1 expression in tumor-associated macrophages and myeloid-derived suppressor cells. *Proceedings of the National Academy of Sciences of the United States of America* 114, 1117-1122.
- 3) Niu, H., Rikihisa, Y., Yamaguchi, M., and Ohashi, N. (2006). Differential expression of VirB9 and VirB6 during the life cycle of *Anaplasma phagocytophilum* in human leucocytes is associated with differential binding and avoidance of lysosome pathway. *Cell Microbiol* 8, 523-534.

- 4) Miura, K., and Rikihisa, Y. (2009). Liver transcriptome profiles associated with strain-specific *Ehrlichia chaffeensis*-induced hepatitis in SCID mice. *Infect Immun* 77, 245-254.