

**Supplementary Table S1:** Oligonucleotide primers used in the study.

Name	Sequences	Orientation
<b>For cloning <i>R. rickettsii</i> Adr2 into pET28a plasmid and testing <i>R. rickettsii</i> by PCR*</b>		
<b>RG75</b>	5'-tgacg <u>CATATG</u> cctttaatagctgctacaagtga-3'	Forward
<b>RG77</b>	5'-tgacg <u>CTCGAG</u> ttaaaatctataccggctgtaagttatg-3'	Reverse
<b>For cloning <i>R. rickettsii</i> OmpB-4 into pET28a plasmid*</b>		
<b>RG78</b>	5'-tgacg <u>CATATG</u> gagaggcattccattca-3'	Forward
<b>RG80</b>	5'-tgacg <u>CTCGAG</u> ttagttctgatctacacccg-3'	Reverse
<b>For testing <i>R. rickettsii</i> by nest PCR</b>		
<b>Adr2-NF2</b>	5'-tctaatacaactgttccagttg-3'	Forward
<b>Adr2-NR2</b>	5'-ctaccatcatctatccagcta-3'	Reverse

\*Capital letters with underline refer to sequences inserted for creating restriction enzyme sites. Five nucleotides were also included in the primers at the 5' end to facilitate restriction enzyme site accessibility by restriction enzymes.

**Supplementary Table S2:** Grading scale used in determining the histopathological scores of tissue samples assessed.

**Grading perivascular inflammation**

- 0 No perivascular inflammation
- 1 1 cell thick, inflammatory cells around the vessel with no involvement of the vessel wall
- 2 2-3 cell thick, perivascular inflammatory infiltrate, with no involvement of the vessel wall
- 3 More than 3 cell thick, perivascular cuffing

**Grading distribution of inflammation**

- 0 Absent
- 1 Focal
- 2 2-4 foci
- 3 Greater than 5

**Nature of inflammation (combination of any of the following)**

- L Lymphocytic
- P Plasmocytic
- H Histiocytic
- N Neutrophilic

**Hemorrhage**

- 0 Absent
- 1 Present

**Grading distribution/severity of non-perivascular inflammatory nodules**

- 0 Absent
- 1 Focal
- 2 2-4 foci
- 3 Greater than 5

**Nature of inflammation (combination of any of the following)**

- L Lymphocytic
- P Plasmacytic
- H Histiocytic
- N Neutrophilic

**Anatomical distribution (liver)**

- Cv Central vein
- Pp Periportal
- R Random

**Intratubular multinuclear giant cells (testicle and epididimus)**

- 0 None
- 1 Present

## Supplementary Figure 1

Petechial skin rashes on a ear



Darkened skin on a testes

