

**Plasmid Containing 18S Ribosomal RNA Gene Fragment from *Babesia bovis***

**Catalog No. NR-28919**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

A 565 base pair fragment of the small subunit ribosomal RNA gene from *Babesia bovis* (*B. bovis*) was amplified by PCR and cloned into vector [pPCR-Script Amp SK\(+\)](#) (Agilent Technologies). The resulting plasmid, NR-28919, may be used in PCR assays for the detection of *B. bovis* in cattle ticks or cattle blood.<sup>1</sup> The plasmid was produced in One Shot<sup>®</sup> TOP10 chemically competent *Escherichia coli* (Invitrogen<sup>™</sup>) and extracted using a QIAGEN<sup>®</sup> EndoFree<sup>®</sup> Plasmid Maxi Kit.

Note: NR-28919 contains the gene required for carbenicillin (Ca) resistance. The recommended concentration of Ca in culture is 100 µg/mL.

**Material Provided:**

Each vial contains 0.7 µg to 1.5 µg of plasmid DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8.0). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

NR-28919 was packaged aseptically in screw-capped cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid Containing 18S Ribosomal RNA Gene Fragment from *Babesia bovis*, NR-28919.”

**Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#), 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

- Guerrero, F. D., et al. “Detection of *Babesia bigemina* Infection in Strains of *Rhipicephalus* (*Boophilus*) *microplus* Collected from Outbreaks in South Texas.” [Vet. Parasitol.](#) 145 (2007): 156-163. PubMed: 17178440.

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