

***Rickettsia sibirica*, Strain 246**

Catalog No. NR-10453

For research use only. Not for human use.

Contributor:

ATCC®

Manufacturer:

Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH

Product Description:

Bacteria Classification: *Rickettsiaceae*, *Rickettsia*

Species: *Rickettsia sibirica*

Strain: 246 (Synonyms for this strain include Siberian tick typhus 246 and STT-246; vials of NR-10453 are labeled Strain STT-246.)

Original Source: *Rickettsia sibirica* (*R. sibirica*), strain 246 is a tick (*Dermacentor nuttalli*) isolate from Krasnojarsk, Russia in 1949.¹

Comment: *R. sibirica*, strain 246 was deposited to the ATCC® about 1985 from the collection of Dr. F. Marilyn Bozeman of the U. S. Food and Drug Administration. The whole genome shotgun sequence of *R. sibirica*, strain 246 has been submitted (GenBank: AABW00000000).²

R. sibirica are Gram-negative, intracellular bacteria that belong to the alpha subdivision of *Proteobacteria*. They are a member of the spotted fever group of Rickettsiales and have been isolated from ticks throughout Europe and Asia. *R. sibirica* are the etiologic agent of North Asian tick typhus (North Asian spotted fever) in humans.

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from African green monkey kidney cells (Vero; ATCC® CCL-81™) infected with *R. sibirica*, strain 246.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-10453 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Host: Vero cells (ATCC® CCL-81™)

Growth Medium: Minimum Essential Medium with Earle's salts supplemented with 10% irradiated fetal bovine serum, 2 mM L-glutamine and 1 mM sodium pyruvate

Infection: Cells should be 80 to 90% confluent (not 100% confluent)

Incubation: 6 to 20 days at 35°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Rickettsia sibirica*, Strain 246, NR-10453."

Biosafety Level: 3

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, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

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References:

1. Bell, E. J. and H. G. Stoenner. "Immunologic

Relationships among the Spotted Fever Group of Rickettsias Determined by Toxin Neutralization Tests in Mice with Convalescent Animal Serums." J. Immunol. 84 (1960): 171-182. PubMed: 13798490.

2. Malek, J. A., et al. "Protein Interaction Mapping on a Functional Shotgun Sequence of *Rickettsia sibirica*." Nucleic Acids Res. 32 (2004): 1059-1064. PubMed: 14872061.

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