

### ***Rickettsia raoultii*, Strain Khabarovsk**

#### **Catalog No. NR-10407**

(Derived from ATCC® VR-1596™)

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

We have been unsuccessful in our attempts to purify NR-10407 from contaminating *Mycoplasma oracle*. Please determine whether or not this product is acceptable for your intended use.

#### **Contributor:**

Professor Pierre-Edouard Fournier, M.D., Ph.D., Directeur, Unité des Rickettsies, Université de la Méditerranée, Faculté de Médecine, Marseille, France

#### **Product Description:**

Bacteria Classification: *Rickettsiaceae*, *Rickettsia*

Species: *Rickettsia raoultii*

Type Strain: Khabarovsk

Original Source: *Rickettsia raoultii* (*R. raoultii*), strain Khabarovsk was isolated from *Dermacentor silvarum* ticks collected in 2005 in the Russian Far East.<sup>1</sup>

Comment: *R. raoultii*, strain Khabarovsk is genetically identical to strain DnS14 which was amplified and sequenced but never cultivated from ticks. *R. raoultii*, strain Khabarovsk was deposited to the ATCC® by Professor Pierre-Edouard Fournier, M.D., Ph.D., Directeur, Unité des Rickettsies, Université de la Méditerranée, Faculté de Médecine, Marseille, France in 2007.

*R. raoultii* 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 (*Dermacentor* species) in Europe and Russian.<sup>1-4</sup>

#### **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. raoultii*, strain Khabarovsk.

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

#### **Packaging/Storage:**

NR-10407 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 32°C and 5% CO<sub>2</sub>

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 raoultii*, Strain Khabarovsk, NR-10407."

#### **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/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

#### **Disclaimers:**

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### References:

1. Mediannikov, O., et al. "*Rickettsia raoultii* sp. nov., a Spotted Fever Group Rickettsia Associated with *Dermacentor* Ticks in Europe and Russia." Int. J. Syst. Evol. Microbiol. 58 (2008): 1635-1639. PubMed: 18599708.
2. Sarih, M., et al. "Spotted Fever Group Rickettsiae in Ticks, Morocco." Emerg. Infect. Dis. 14 (2008): 1067-1073. PubMed: 18598627.
3. Márquez, F. J. "Spotted Fever Group in Ticks from Southeastern Spain Natural Parks." Exp. Appl. Acarol. 45 (2008): 185-194. PubMed: 18677442.
4. Boldiš, V., et al. "Rickettsial Agents in Slovakian Ticks (Acarina, Ixodidae) and Their Ability to Grow in Vero and L929 Cell Lines." Ann. N. Y. Acad. Sci. 1149 (2008): 281-285. PubMed: 19120229.

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