**Product Information Sheet for NR-51407**

**Rickettsia helvetica, Strain C3**

**Catalog No. NR-51407**

For research use only. Not for human use.

**Contributor:**
ATCC®

**Manufacturer:**
BEI Resources

**Product Description:**

*Bacteria Classification: Rickettsiaceae, Rickettsia*  
*Species: Rickettsia helvetica* (also known as Swiss agent)\(^1\)\(^2\)  
*Strain: C3*  
*Original Source: Rickettsia helvetica (R. helvetica)*, strain C3 was isolated from triturated *Ixodes ricinus* (*I. ricinus*) nymphs from Switzerland in 1979.\(^1\)\(^2\)

*R. helvetica* is a member of the spotted fever group of Rickettsiaceae found in Europe and Asia.\(^3\)\(^4\) *R. helvetica* is an intracellular Gram-negative pathogen that is transmitted to a human host via interaction with an infected tick (commonly *I. ricinus* but has also been isolated from *Dermacentor reticulatus*).\(^3\) The tick acts as both a natural reservoir and a vector for disease transmission. Previously considered nonpathogenic, *R. helvetica* can cause a Mediterranean Spotted Fever-like illness, as well as perimyocarditis and meningitis.\(^3\)\(^4\)

**Material Provided:**
Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with *R. helvetica*, strain C3, supplemented with 20% fetal bovine serum and 10% DMSO.

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

**Packaging/Storage:**
NR-51407 was packaged aseptically in screw-capped plastic cryovials and is provided frozen on dry ice. The product should be stored at -130°C or colder, preferably in the vapor phase of a liquid nitrogen freezer. If liquid nitrogen storage facilities are not available, frozen cryovials may be stored at -70°C or colder for approximately one week. Freeze-thaw cycles should be avoided.

**Growth Conditions:**
*Host:* *Cercopithecus aethiops* kidney epithelial cells (*Vero; ATCC® CCL-81™*)  
*Growth Medium:* Dulbecco's Modified Eagle's Medium (DMEM) containing 4 mM L-glutamine, 4500 mg per L glucose, 1 mM sodium pyruvate, and 1500 mg per L sodium bicarbonate supplemented with 5% fetal bovine serum, or equivalent.

**Infection:** Cells should be 60% to 80% confluent.  
**Incubation:** 6 to 14 days at 34°C and 5% CO₂  
**Cytopathic Effect:** Cell rounding and sloughing

**References:**
2. Beati, L., et al. "Confirmation that *Rickettsia helvetica* sp. nov. is a Distinct Species of the Spotted Fever Group of its derivatives must contact the contributor to determine if a license before first commercial sale. This material may be subject to third party patent rights.

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