

Toscana Virus, ISS Phl 3

Catalog No. NR-51664

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Phenuiviridae*, *Phlebovirus*

Species: Toscana virus (also referred to as Naples phlebovirus, Sandfly fever virus)

Strain/Isolate: ISS Phl 3

Original Source: Toscana virus (TOSV), ISS Phl 3 was isolated from a sandfly (*Phlebotomus perniciosus*) collected in Monte Argentario, Toscana, Italy on July 17, 1971.¹

TOSV is an arthropod-borne virus with a negative-sense, single-stranded RNA genome that consists of three segments- large, encoding RNA-dependent RNA polymerase; medium, encoding the envelope glycoproteins; small, encoding the nucleoproteins.² TOSV has been isolated from sandfly (*Phlebotomus perniciosus* and *Phlebotomus perfliewi*), wild animals and humans in Italy, France, Spain and from Mediterranean countries. The role of vertebrates in the maintenance of the transmission cycle of TOSV, however, remains unclear.^{2,3} A substantial proportion of human TOSV infections are asymptomatic but clinical infections can range in severity from self-limiting febrile illness to severe meningoencephalitis.⁴

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with TOSV, ISS Phl 3.

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

Packaging/Storage:

NR-51664 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: *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC® CRL-1586™)

Growth Medium: Dulbecco's Modified Eagle's Medium modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate, and 1.5 g/L sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 70% to 90% confluent

Incubation: 2 to 9 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Toscana Virus, ISS Phl 3, NR-51664."

Biosafety Level: 2

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/bmb15/index.htm.

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References:

1. Russell, B. J., Personal Communication.
2. Charrel, R. N., et al. "Emergence of Toscana Virus in Europe." Emerg. Infect. Dis. 11 (2005): 1657-1663. PubMed: 16318715.

3. Di Nicuolo, G., et al. "Toscana Virus Central Nervous System Infections in Southern Italy." J. Clin. Microbiol. 43 (2005): 6186-6188. PubMed: 16333126.
4. Valassina, M., et al. "Evidence of Toscana Virus Variants Circulating in Tuscany, Italy, During the Summers of 1995 to 1997." J. Clin. Microbiol. 36 (1998): 2103-2104. PubMed: 9650974.

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