West Nile Virus, 385-99

Catalog No. NR-158
(derived from ATCC® VR-1507™)

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:

Virus Classification: Flavivirus, Flaviviridae
Agent: West Nile Virus (WNV)
Type Strain/Isolate: 385-99
Original Source: Isolated from the liver of a snowy owl (Nyctea scandiaca) found dead in the Bronx Zoo in New York City during the 1999 WNV outbreak.1,2
Comments: The complete genome of WNV 385-99 has been sequenced (GenBank: AY842931).3

WNV is an arthropod-borne virus which circulates in natural transmission cycles between primarily mosquitoes (Culex species) and birds,4 with humans as incidental hosts. The virus is indigenous to Africa, Asia, Australia, and Europe, and has recently caused large epidemics in Romania, Russia, and Israel. WNV was recently introduced to North America, where it was first detected in 1999 during an epidemic of meningoencephalitis in New York City.5 Most human WNV infections are asymptomatic6 but clinical infections can range in severity from uncomplicated West Nile fever to fatal meningoencephalitis; the incidence of severe neuroinvasive disease and death increase with age.7 There is no established WNV-specific treatment or licensed vaccine for humans currently available.8 Prevention depends on organized, sustained vector mosquito control and public education.9

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from Cercopithecus aethiops kidney epithelial cells (Vero; ATCC® CCL-81™) infected with WNV, 385-99.

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

Packaging/Storage:
NR-158 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -80°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 supplemented with 2 mM L-glutamine, 1 mM sodium pyruvate, and 2% irradiated fetal bovine serum
Infection: Cells should be 80-90% confluent
Incubation: 3 to 6 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: West Nile Virus, 385-99, NR-158.”

Biosafety Level: 3

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References:

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