Langat Virus, TP21

Catalog No. NR-51658

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:

**Virus Classification:** Flaviviridae, Flavivirus

**Species:** Langat virus

**Strain/Isolate:** TP21

**Original Source:** Langat virus (LGTV), TP21 was isolated from an *Ixodes granulatus* tick, Ulu Langat Forest Reserve, Malaysia on April 17, 1956.

**Comments:** The complete genome of LGTV, TP21 has been sequenced (GenBank: EU790644).

LGTV are non-segmented positive-sense RNA viruses belonging to tick-borne encephalitis virus (TBEV) serocomplex of the genus *Flavivirus* in the family *Flaviviridae.* LGTV, TP21 was initially identified as Yelantsiev virus in the 1960s and evaluated as a live attenuated vaccine candidate. LGTV are less pathogenic for humans than many other viruses in the TBEV group, such as Central European and Far Eastern tick-borne encephalitis, Kyasanur forest disease, Louping ill, Negishi, Powassan and Omsk hemorrhagic fever viruses. Because of this reduced virulence in humans, LGTV, TP21 has been widely investigated as a human vaccine candidate.

**Material Provided:**
Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney cells infected with LGTV, TP21.

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

**Packaging/Storage:**
NR-51658 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 cells (Vero E6; ATCC® CRL-1586™)

**Growth Medium:** Dulbecco’s Minimum Essential Medium containing 4 mM L-glutamine, 1 mM sodium pyruvate, 4.5 g/L glucose and 1.5 g/L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

**Infection:** Cells should be 80% to 90% confluent

**Incubation:** 6 to 12 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: Langat Virus, TP21, NR-51658.”

**Biosafety Level:** 2


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**References:**


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