

Synonym

Envelope protein E/E protein (TBEV)

Source

TBEV (European subtype, strain Neudoerfl) Envelope protein E, His Tag(ENE-T52H4) is expressed from human 293 cells (HEK293). It contains AA Ser 281-Lys 675 (Accession # [P14336](#)).

Molecular Characterization

Envelope protein E(Ser 281-Lys 675) P14336	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 63.2 kDa. The protein migrates as 50-55 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-HPLC.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

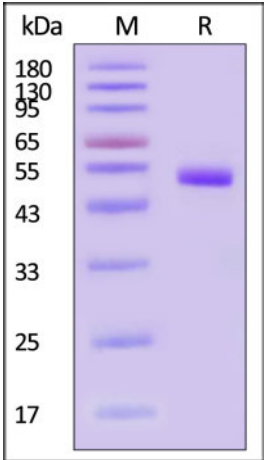
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

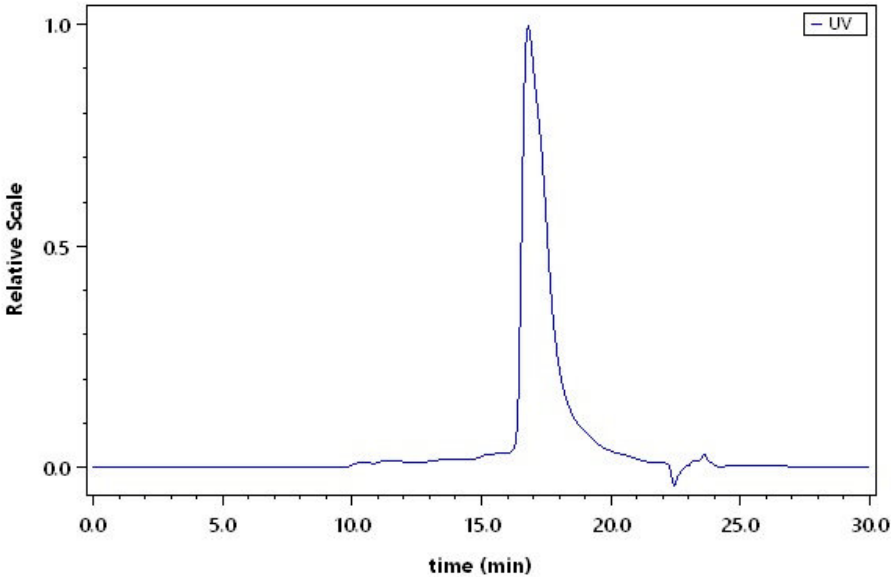
SDS-PAGE



TBEV (European subtype, strain Neudoerfl) Envelope protein E, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA

SEC-HPLC



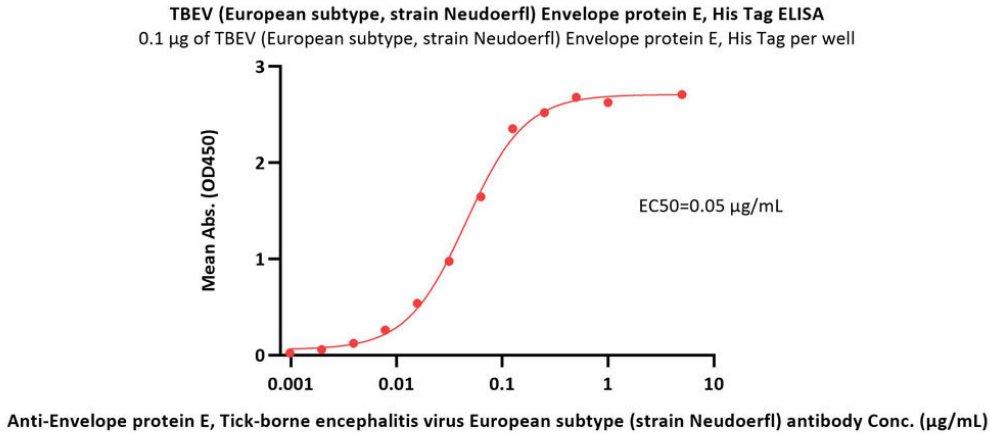
The purity of TBEV (European subtype, strain Neudoerfl) Envelope protein E, His Tag (Cat. No. ENE-T52H4) was greater than 95% as determined by SEC-HPLC.

Discounts, Gifts,
and more!



TBEV (European subtype, strain Neudoerfl) Envelope protein E, His Tag (HPLC verified)

Catalog # ENE-T52H4



Immobilized TBEV (European subtype, strain Neudoerfl) Envelope protein E, His Tag (Cat. No. ENE-T52H4) at 1 µg/mL (100 µL/well) can bind Anti-Envelope protein E, Tick-borne encephalitis virus European subtype (strain Neudoerfl) antibody with a linear range of 0.001-0.125 µg/mL (QC tested).

Background

Tick-borne encephalitis virus (TBEV), which belongs to Family Flaviviridae, is the leading cause of Tick-borne encephalitis in human and animals across Europe and East Asia. The infection of TBE virus will lead to the illness called Tick-borne encephalitis with high morbidity and mortality. TBE virus has three regional subtypes of European subtype (TBEV-Eu), Far-eastern subtype TBEV (TBEV-FE) and Siberian subtype (TBEV-Sib) that dominate their respective regions; however, the sequence variety at amino acid level is quite low and the European subtypes’ vaccines show cross protection against other subtypes. The envelope protein E is the major viral surface antigen that plays an important role in viral infection, making it a great target for vaccine development.

