DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (MALS verified)

Catalog # NS1-D52H3

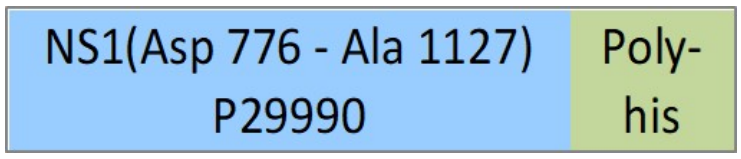
Synonym

NS1

Source

DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag(NS1-D52H3) is expressed from human 293 cells (HEK293). It contains AA Asp 776 - Ala 1127 (Accession # P29990-1).
Predicted N-terminus: Asp 776

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 41.8 kDa. The protein migrates as 45-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

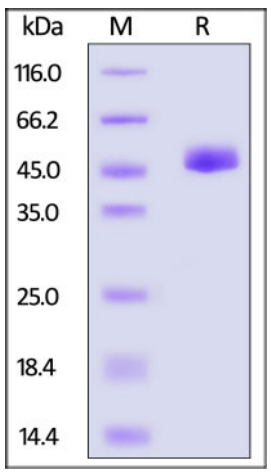
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

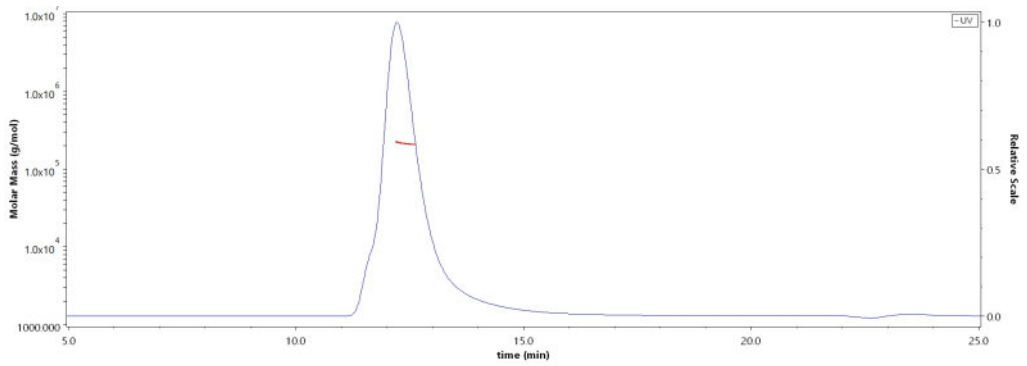
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



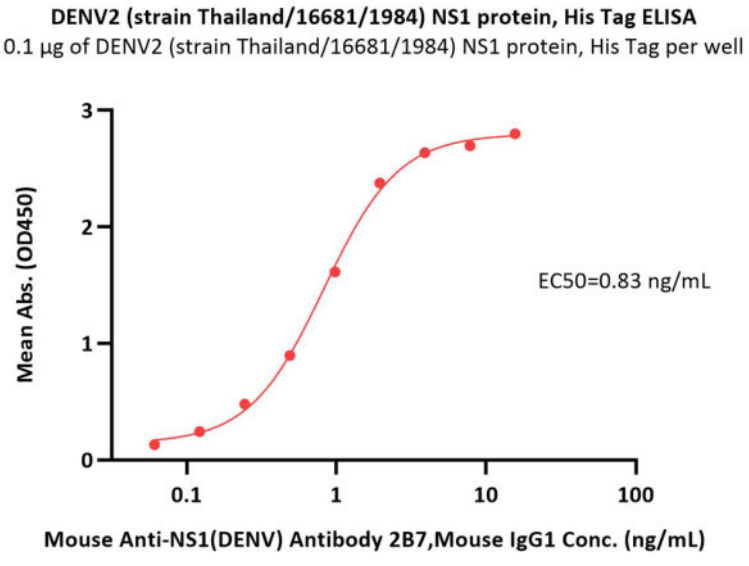
DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (Cat. No. NS1-D52H3) is more than 90% and the molecular weight of this protein is around 200-225 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (Cat. No. NS1-D52H3) at 1 μg/mL (100 μL/well) can bind Mouse Anti-NS1(DENV) Antibody 2B7,Mouse IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Background

Dengue is a mosquito-borne viral disease widely spread all over the world transmitted by 4 serotypes of dengue virus (DENV). The symptoms range from mild dengue fever to dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS) with high mortality. Currently, most of the studies on DENV vaccines emphasize on its envelope protein (i.e., Sanofi's tetravalent dengue vaccine Dengvaxia). However, the fact pointing out that the vaccines with Envelope protein may could have negative effect on people never infected by DENV which makes the non-structural protein NS1 become another great target for vaccine research with its ability to avoid Antibody Dependent Enhancement.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.