

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

Catalog # NS1-D52H3



Synonym

Non-structural protein 1/NS1 (DENV)

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

NS1(Asp 776 - Ala 1127) P29990	Poly- his
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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.
The protein is designed as a tetramer.

Endotoxin

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

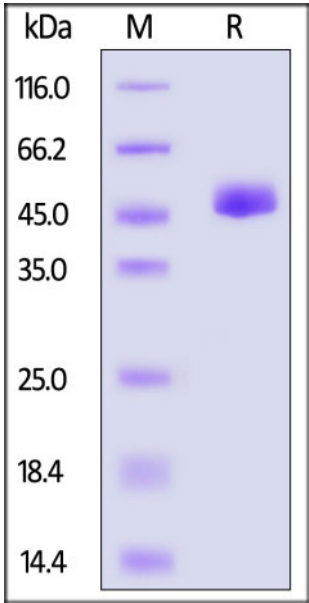
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

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

ACRO Quality Management System

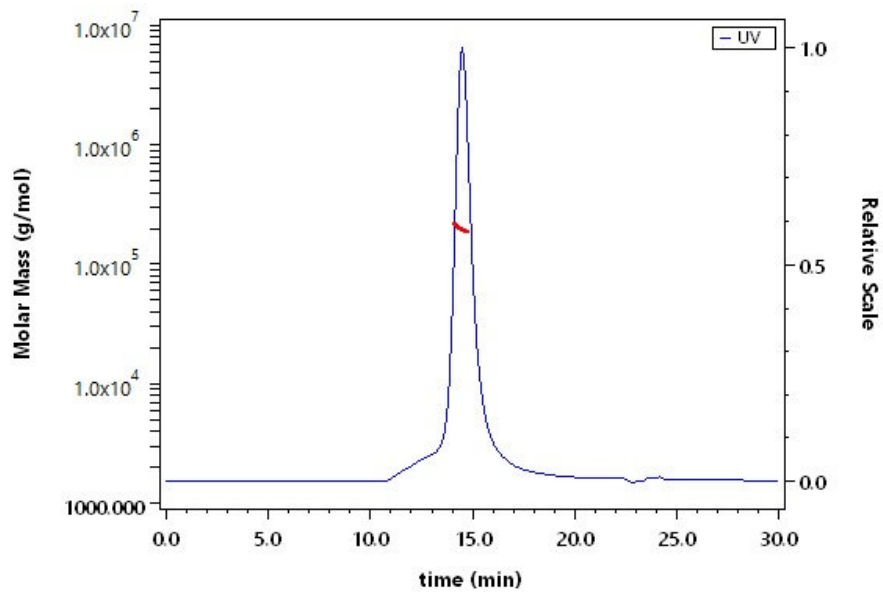
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



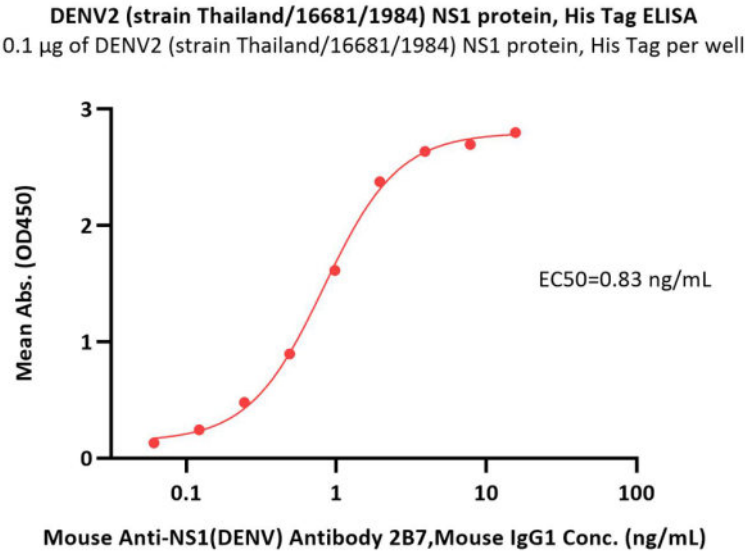
DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



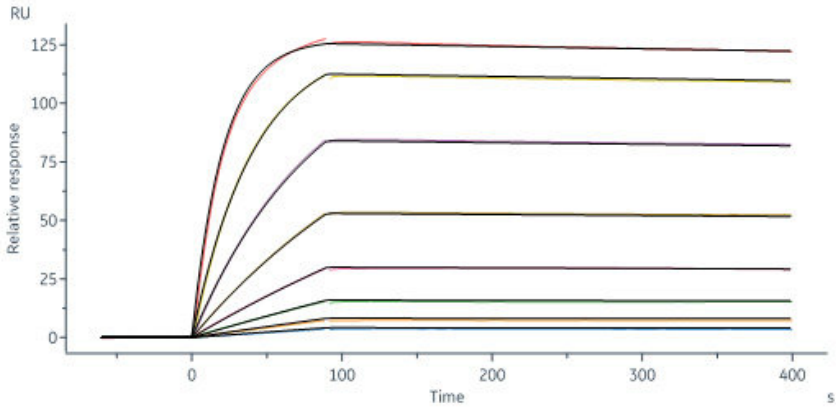
The purity of DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (Cat. No. NS1-D52H3) is more than 90% and the molecular weight of this protein is around 200-225 kDa verified by SEC-MALS.

Bioactivity-ELISA

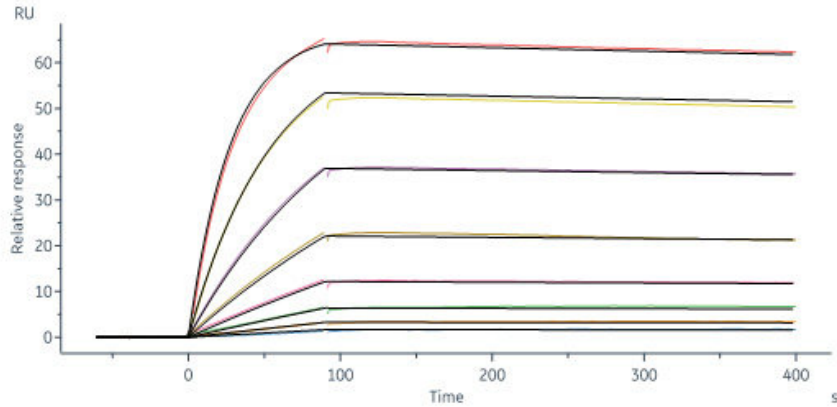


Immobilized DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (Cat. No. NS1-D52H3) at 1 µg/mL (100 µL/well) can bind Mouse Anti-NS1(DENV) Antibody 2B7, Mouse IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity-SPR



Monoclonal Anti-DENV 2 (strain Thailand/16681/1984)-NS1 Antibody, Human IgG1 (2C8) (Cat. No. DE1-M755) captured on Protein A Chip can bind DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (Cat. No. NS1-D52H3) with an affinity constant of 86.1 PM as determined in a SPR assay (Biacore 8K) (Routinely tested).



Monoclonal Anti-DENV 2(strain Thailand/16681/1984)-NS1 Antibody, Human IgG1 (7E12) (Cat. No. DE1-M756) captured on Protein A Chip can bind DENV2 (strain Thailand/16681/1984) NS1 protein, His Tag (Cat. No. NS1-D52H3) with an affinity constant of 0.167 nM as determined in a SPR assay (Biacore 8K) (Routinely 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.



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