

Synonym

Neurofilament heavy polypeptide

Source

Human NFH, His Tag(NFH-H5544) is expressed from Baculovirus-Insect cells.

It contains AA Met 1 - Lys 1026 (Accession # [P12036-1](#)).

Predicted N-terminus: Met

Molecular Characterization

Poly-his	NFH(Met 1 - Lys 1026) P12036-1
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This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 114.5 kDa. The protein migrates as 160-230 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.

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.

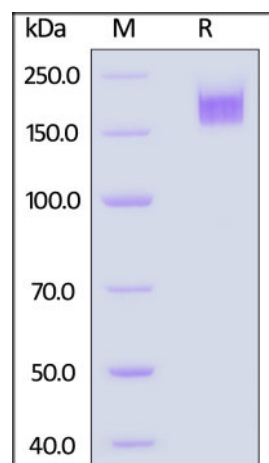
Storage

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

Human NFH, 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%.

Background

Neurofilaments (NF) are classed as type IV intermediate filaments found in the cytoplasm of neurons. Together with microtubules and microfilaments, they form the neuronal cytoskeleton. Neurofilaments usually contain three intermediate filament proteins: NFL, NFM, and NFH which are involved in the maintenance of neuronal caliber. Neurofilament light (NfL) is a scaffolding protein that is located primarily within myelinated axons and that provides increased conduction speed and structural support. In recent years, NfL has been used as a disease biomarker on the basis of the observation that axonal injury results in elevated levels of NfL in cerebrospinal fluid or blood.

Clinical and Translational Updates

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