

Synonym

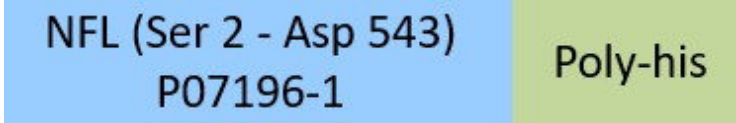
Neurofilament light polypeptide

Source

Human NFL Protein, His Tag(NFL-H51H4) is expressed from E. coli cells. It contains AA Ser 2 - Asp 543 (Accession # [P07196-1](#)).

Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 63.4 kDa. The protein migrates as 65-80 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Purity

>95% as determined by SDS-PAGE.

>90% 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

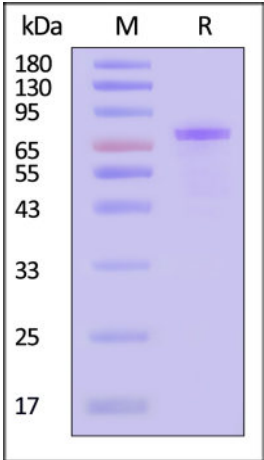
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

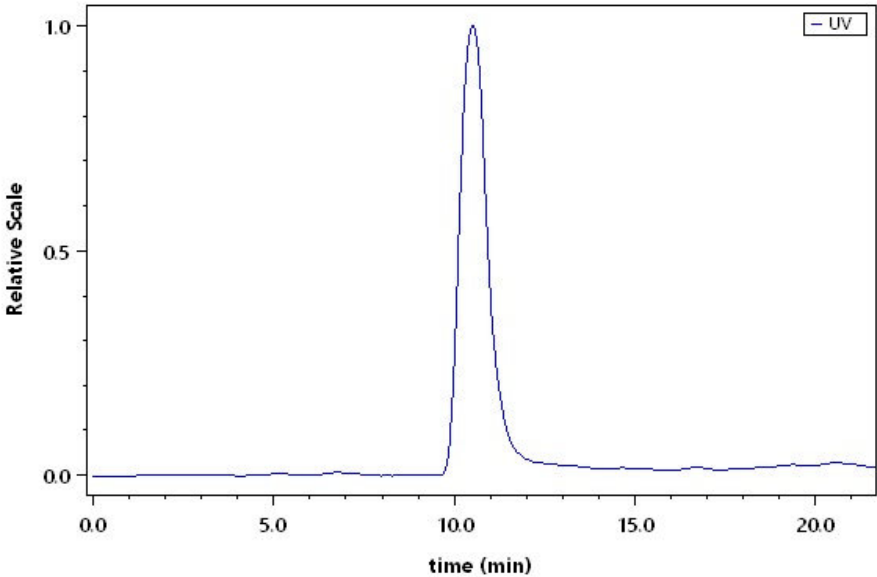
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human NFL 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% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-HPLC



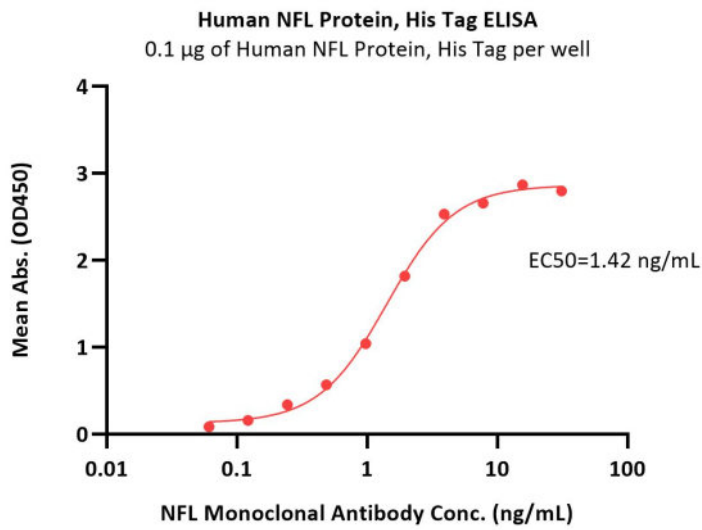
The purity of Human NFL Protein, His Tag (Cat. No. NFL-H51H4) was greater than 90% as determined by SEC-HPLC.

Bioactivity-ELISA



Human NFL Protein, His Tag (HPLC verified)

Catalog # NFL-H51H4



Immobilized Human NFL Protein, His Tag (Cat. No. NFL-H51H4) at 1 µg/mL (100 µL/well) can bind NFL Monoclonal Antibody with a linear range of 0.06-4 ng/mL (QC tested).

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 heavy (NFH) can server as biomarkers for several diseases by indicating axonal injury.

