Recombinant NFL protein (His tag)

Catalog Number	542040
Synonyms	NF-L; 68 kDa neurofilament protein; Neurofilament triplet L protein
Species	Human
Expression System	E. coli
Accession	P07196
Molecular Weight	Predictes a molecular mass of 38.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	79-397
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 79-397 aa (P07196) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product features a recombinant fragment of the human Neurofilament Light Polypeptide (NF-L), corresponding to amino acids 79-397. This 319-amino acid fragment has been computationally optimized for stability and solubility, making it an ideal tool for structural studies and biochemical assays focused on neuronal intermediate filament function. Neurofilaments are key structural components of the neuronal cytoskeleton, typically composed of three intermediate filament proteins: NEFL (NF-L), NEFM, and NEFH. These proteins collectively maintain neuronal caliber and contribute to axonal integrity. NF-L may also collaborate with other neuronal intermediate filament proteins like PRPH and INA to establish filamentous networks essential for neuronal structure and function. The full-length protein is localized to the axon and cytoskeleton, where it supports the mechanical stability and organization of neuronal processes.