Recombinant NFM protein (His tag)

Catalog Number	537443
Synonyms	NF-M; 160 kDa neurofilament protein; Neurofilament 3; Neurofilament triplet M protein
Species	Human
Expression System	E. coli
Accession	P07197
Molecular Weight	Predictes a molecular mass of 38.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	97-412
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 97-412 aa (P07197) 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	Recombinant Human Neurofilament Medium Polypeptide (NF-M) Fragment (97-412) is a high-purity protein designed for studying the IF rod domain's role in neuronal structure and function. This 316-amino acid fragment provides a targeted tool for investigating neurofilament assembly and maintenance in research applications. Neurofilament Medium Polypeptide (NF-M) is a key component of neuronal intermediate filaments, working in concert with NEFL and NEFH to maintain neuronal caliber and structural integrity. As part of the neurofilament triplet proteins, NF-M contributes to the cytoskeletal framework that determines axon diameter and supports neuronal function. The protein is localized to the cytoplasmic cytoskeleton and specifically enriched in axonal projections, where it helps establish and maintain the structural organization essential for proper neuronal signaling and transport. This recombinant fragment encompassing the IF rod domain (101-412) allows researchers to probe the specific mechanical and structural properties of neurofilaments without interference from other protein regions.