

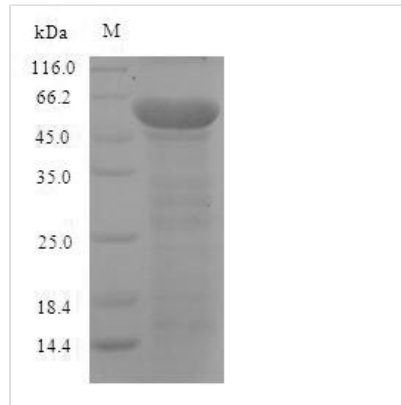


Recombinant Mouse Neurofilament light polypeptide (Nefl)

Product Code	CSB-YP015688MO
Relevance	Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber.
Abbreviation	Recombinant Mouse Nefl protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P08551
Alias	68 kDa neurofilament proteinNeurofilament triplet L protein
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SSFGYDPYFSTSYKRRYVETPRVHISSVRSGYSTARSAYSSYSAPVSSSLSVR RSYSSSSGSLMPLENLDLSQVA AISNDLKSIRTQEKAQLQDLNDRFASFIERV HELEQQNKVLEAELLVLRQKHSEPSRFRALYEQEIRDRLRLAAEDATNEKQALQ GEREGLEETLRNLQARYEEEEVLSREDAEGRLMEARKGADEAALARAEELEKRID SLMDEIAFLKKVHEEEIAELQAQIQYAQISVEMDVSSKPDLSAALKDIRAQYEKL AAKNMQNAEEWFKSRFTVLTESAAKNTDAVRAAKDEVSESRLLKAKTLEIEA CRGMNEALEKQLQELEDKQNADISAMQDTINKLENELRSTKSEMARYLKEYQ DLLNVKMALDIEIAAYRKLLEGEETRLSFTSVGSITSGYSQSSQVFGRSAYSGL QSSSYLMSARSPAYYTSHVQEEQTEVEETIEATKAEEAKDEPPSEGEAEIEEE KEKEEGEEEEGAEEEEAAKDESEDTKEEEEGGEGEEEDTKESEEEEKKEESA GEEQVAKKKD
Research Area	Others
Source	Yeast
Target Names	Nefl
Protein Names	Recommended name: Neurofilament light polypeptide Short name= NF-L Alternative name(s): 68 kDa neurofilament protein Neurofilament triplet L protein
Expression Region	2-543aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	63.4kDa
Protein Length	Full Length of Mature Protein



Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The gene fragment corresponding to the 2-543aa of the mouse Nefl protein was synthesized, with appropriate restriction sites suitable for in-frame cloning into an expression vector, with N-terminal 6xHis tag. The yeast was transfected with the expression vector, and the clone was expressed upon certain induction. After the induced cell centrifugation, the recombinant protein was purified from the cell extract and presented as N-terminal 6xHis-tagged fusion. This recombinant mouse Nefl protein's purity is greater than 90% assayed by SDS-PAGE. The Nefl protein ran to a band of about 50-66 kDa molecular weight on the gel, indicating a glycosylated form of the protein.

Neurofilament light chain protein (NEFL), a cytoskeleton protein of neurons, can reflect the neuronal injury when appearing in biofluids. Neurofilaments comprise the axoskeleton and they functionally maintain the neuronal caliber. Researchers revealed that they are likely to play a role in intracellular transport to axons and dendrites. NEFL aberrantly expression was identified the in a sample of Iraqi multiple sclerosis patients. Additionally, NEFL participates the regulation of gastric carcinogenesis. NEFL gene mutation is common yet inefficient in neuroblastoma tumours. A properly assembled filamentous network is critical for neuronal function and abnormal expression of NEFL could be a potential mechanism of Schizophrenia, which is a severe neurodevelopmental disease with unknown pathogenic mechanisms characterized with impaired cognitive function.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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