Recombinant Human NEFL, His-tagged

Cat. No. NEFL-26033TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment, corresponding to amino acids 391-543 of Human 68kDa Neurofilament, with a N-terminal His tag. MWt 37kDa;
Species	Human
Source	E.coli
ProteinLength	391-543 a.a.
Description	Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and they functionally maintain the neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the light chain neurofilament protein. Mutations in this gene cause Charcot-Marie-Tooth disease types 1F (CMT1F) and 2E (CMT2E), disorders of the peripheral nervous system that are characterized by distinct neuropathies. A pseudogene has been identified on chromosome Y.
Conjugation	HIS
Form	Lyophilised:Reconstitution with 139 µl aqua dest.
Storage buffer	Preservative: NoneConstituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

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Sequences of amino acids	KLLEGEETRLSFTSVGSITSGYSQSSQVFGRSAYGGLQTS SYLMSTRSFPSYYTSH VQEEQIEVEETIEAAKAEEAKD EPPSEGEAEEEEKDKEEAEEEEAAEEEEAAKEESE EAK EEEEGGEGEEGEETKEAEEEEKKVEGAGEEQAAKKKD
Sequence Similarities	Belongs to the intermediate filament family.

GENE INFORMATION

Gene Name	NEFL neurofilament, light polypeptide [Homo sapiens]
Official Symbol	NEFL
Synonyms	NEFL; neurofilament, light polypeptide; neurofilament, light polypeptide 68kDa; neurofilament light polypeptide; CMT1F; CMT2E; NF68; NFL;
Gene ID	4747
mRNA Refseq	NM_006158
Protein Refseq	NP_006149
MIM	162280
Uniprot ID	P07196
Chromosome Location	8p21.2
Pathway	Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem; CREB

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	phosphorylation through the activation of CaMKII, organism-specific biosystem; CREB phosphorylation through the activation of Ras, organism-specific biosystem;
Function	identical protein binding; protein C-terminus binding; protein binding; structural constituent of cytoskeleton;

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