

Immunotag™ NF-L Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT3087
Product Description	Immunotag™ NF-L Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	NFL
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	IHC-p,WB,ELISA
Recommended Dilution	WB 1:500-2000 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human NF-L
Specificity	NF-L Polyclonal Antibody detects endogenous levels of NF-L protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	NEFL
Accession No.	P07196 P08551 P19527
Alternate Names	NEFL; NF68; NFL; Neurofilament light polypeptide; NF-L; 68 kDa neurofilament protein; Neurofilament triplet L protein

Antibody Specification

Description	neurofilament, light polypeptide(NEFL) Homo sapiens 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. [provided by RefSeq, Oct 2008],
Cell Pathway/ Category	Amyotrophic lateral sclerosis (ALS),
Protein Expression	Amygdala,Brain,Fetal brain cortex,Thalamus,
Subcellular Localization	cytoplasm,cytosol,neurofilament,axon,growth cone,TSC1-TSC2 complex,myelin sheath,axon cytoplasm,
Protein Function	caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,disease:Defects in NEFL are the cause of Charcot-Marie-Tooth disease type 1F (CMT1F) [MIM:607734]. CMT1F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT1 group are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet. CMT1F is characterized by onset in infancy or childhood (range 1 to 13 years).,disease:Defects in NEFL are the cause of Charcot-Marie-Tooth disease type 2E (CMT2E) [MIM:607684]. CMT2E is an autosomal dominant form of Charcot-Marie-Tooth disease type 2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy.,domain:The extra mass and high charge density that distinguish the neurofilament proteins from all other intermediate filament proteins are due to the tailpiece extensions. This region may form a charged scaffolding structure suitable for interaction with other neuronal components or ions.,function:Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber.,miscellaneous:NF-L is the most abundant of the three neurofilament proteins and, as the other nonepithelial intermediate filament proteins, it can form homopolymeric 10-nm filaments.,PTM:O-glycosylated.,similarity:Belongs to the intermediate filament family.,subunit:Interacts with RGNEF.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.