

NEFL antibody

Catalog No: #38115

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	NEFL antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total NEFL antibody.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant Protein of human NEFL.
Target Name	NEFL
Other Names	NEFL;CMT1F;CMT2E; NF L;NFL;68 kDa neurofilament protein
Accession No.	Swiss-Prot#: P07196NCBI Gene ID: 4747
SDS-PAGE MW	62kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

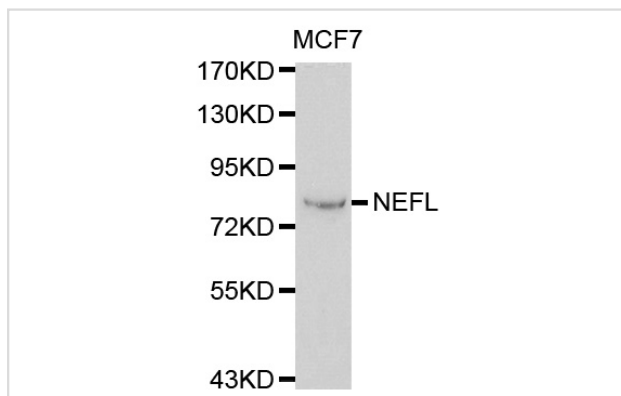
Application Details

Western blotting: □ 1:500 - 1:2000

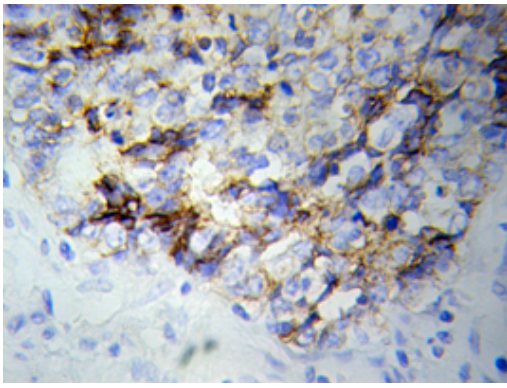
Immunohistochemistry: □ 1:50 - 1:200

Immunofluorescence: □ 1:50 - 1:200

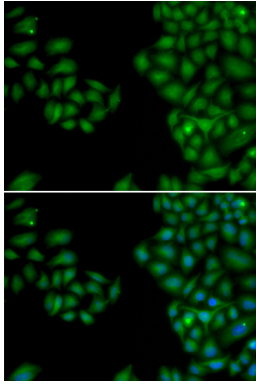
Images



Western blot analysis of extracts of MCF7 cells using NEFL antibody.



Immunohistochemistry analysis of paraffin-embedded H-tonsil using NEFL antibody.



Immunofluorescence analysis of HeLa cell using NEFL antibody. Blue: DAPI for nuclear staining.

Background

The cytoskeleton consists of three types of cytosolic fibers: actin microfilaments, intermediate filaments, and microtubules. Neurofilaments are the major intermediate filaments found in neurons and consist of light (NFL), medium (NFM), and heavy (NFH) subunits (1). Similar in structure to other intermediate filament proteins, neurofilaments have a globular amino-terminal head, a central α -helical rod domain, and a carboxy-terminal tail. A heterotetrameric unit (NFL-NFM and NFL-NFH) forms a protofilament, with eight protofilaments comprising the typical 10 nm intermediate filament (2). While neurofilaments are critical for radial axon growth and determine axon caliber, microtubules are involved in axon elongation. PKA phosphorylates the head domain of NFL and NFM to inhibit neurofilament assembly (3,4). Neurofilament accumulations are found in many human neurological disorders including Parkinson's disease (in Lewy bodies along with α -synuclein), Alzheimer's disease, Charcot-Marie-Tooth disease, and Amyotrophic Lateral Sclerosis (ALS) (1).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.