

# Rabbit anti-human NEFL Polyclonal Antibody

Catalog Number: R16014P

General Information	
<b>Immunogen</b>	Recombinant Protein of human NEFL
<b>IgG type</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Specificity</b>	human NEFL
<b>Applications &amp; dilution</b>	WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:200
<b>Formulation</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
<b>Purity</b>	≥95% purity by SDS-PAGE
<b>Storage</b>	Store at -20°C. Avoid freeze / thaw cycles.
<b>Abbreviation:</b> ELISA: Enzyme-linked immunosorbent assay; ITA: immunoturbidimetric assay; IP: immunoprecipitation; IHC: immunohistochemistry; IF: immunofluorescence. WB: western blot; FC: flowcytometry	

## 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  $\alpha$ -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  $\alpha$ -synuclein), Alzheimer's disease, Charcot-Marie-Tooth disease, and Amyotrophic Lateral Sclerosis (ALS) (1).

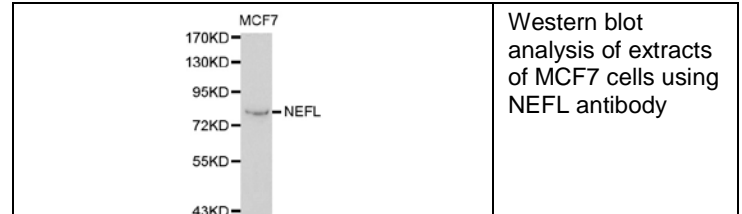
**For research use only**

## Preparation

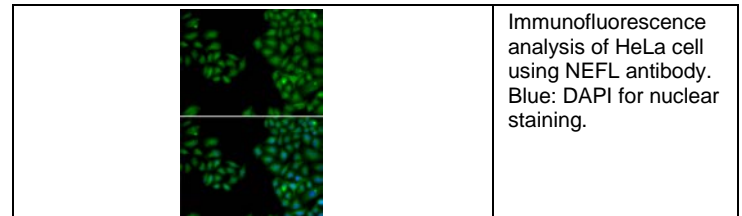
Polyclonal antibody is produced by immunizing rabbit with recombinant Protein of human NEFL and purified using protein A resin.

## Applications

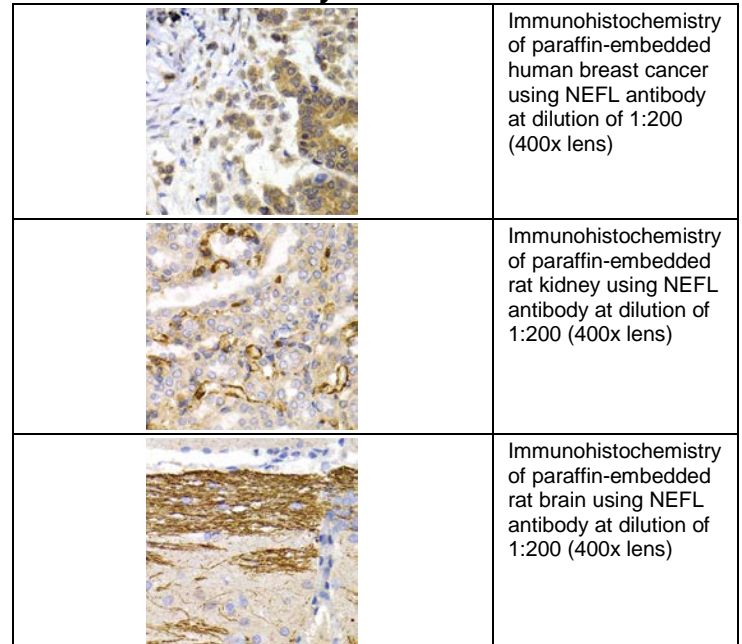
### Western blot



### Immunofluorescence



### Immunohistochemistry



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### **Storage**

This antibody is shipped at 4 °C. This product is stable for 12 months from date of receipt when stored at -20 °C to -70 °C. Avoid freeze/thaw cycles.

### **Hazard/Biohazard**

This antibody contains 0.09% sodium azide as preservative. Please handle and dispose the product properly. No known biohazard is associated with this product.

**For research use only**