

Product datasheet

Recombinant Human Neurofilament heavy polypeptide protein ab158986

1 Image

Description

Product name	Recombinant Human Neurofilament heavy polypeptide protein		
Expression system	Wheat germ		
Protein length	Protein fragment		
Animal free	No		
Nature	Recombinant		
Species	Human		
Sequence	LKCDVTSALREIRAQLEGHAVQSTLQSEEWFRVRLDRLS EAAKVNTDAMR SAQEEITEYRRQLQARTTELEALKSTKDSLQRSELEDR HQADIASYQE A		
Amino acids	263 to 363		
Tags	GST tag N-Terminus		

Specifications

Our <b>Abpromise guarantee</b> covers the use of <b>ab158986</b> in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
Applications	Western blot ELISA
Form	Liquid
Additional notes	

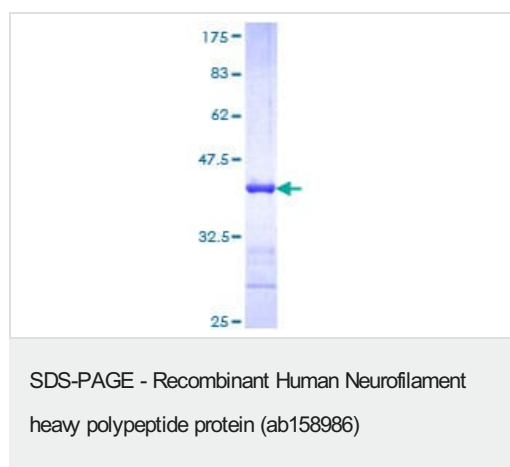
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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## General Info

<b>Function</b>	Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber. NF-H has an important function in mature axons that is not subserved by the two smaller NF proteins.
<b>Involvement in disease</b>	Defects in NEFH are a cause of susceptibility to amyotrophic lateral sclerosis (ALS) [MIM:105400]. ALS is a neurodegenerative disorder affecting upper and lower motor neurons, and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology is likely to be multifactorial, involving both genetic and environmental factors.
<b>Sequence similarities</b>	Belongs to the intermediate filament family.
<b>Post-translational modifications</b>	<p>There are a number of repeats of the tripeptide K-S-P, NFH is phosphorylated on a number of the serines in this motif. It is thought that phosphorylation of NFH results in the formation of interfilament cross bridges that are important in the maintenance of axonal caliber. Phosphorylation seems to play a major role in the functioning of the larger neurofilament polypeptides (NF-M and NF-H), the levels of phosphorylation being altered developmentally and coincident with a change in the neurofilament function.</p> <p>Phosphorylated in the Head and Rod regions by the PKC kinase PKN1, leading to inhibit polymerization.</p>

## Images



ab158986 on a 12.5% SDS-PAGE stained with Coomassie Blue.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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