

ARG81164 Phosphorylated Neurofilament NF-H ELISA Kit

Package: 96 wells
Store at: 4°C, -20°C

Summary

Product Description	ARG81164 Phosphorylated Neurofilament NF-H ELISA Kit is an Enzyme Immunoassay kit for the quantification of Phosphorylated Neurofilament NF-H in plasma, serum, CSF and tissue extracts.
Tested Reactivity	Hu, Ms, Rat, Chk, Cow, Hrs, Pig
Tested Application	ELISA
Target Name	Neurofilament NF-H
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sample Type	Plasma, serum, CSF and tissue extracts.
Standard Range	0.156 - 10 ng/ml
Sample Volume	50 µl
Precision	Intra-Assay CV: less than 6%; Inter-Assay CV: less than 10%
Alternate Names	Neurofilament heavy polypeptide; 200 kDa neurofilament protein; NF-H; Neurofilament triplet H protein; NFH

Application Instructions

Assay Time	~ 3 hours
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Properties

Form	96 well
Storage instruction	Store components at 4°C or -20°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	NEFH
Gene Full Name	neurofilament, heavy polypeptide
Background	Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and functionally maintain neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the heavy neurofilament protein. This protein is commonly used as a biomarker of neuronal damage and susceptibility to amyotrophic lateral sclerosis (ALS) has been associated with mutations in this gene. [provided by RefSeq, Oct 2008]
Function	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. [UniProt]

Highlight

Related products:

[Neurofilament antibodies](#); [Neurofilament ELISA Kits](#); [Neurofilament Duos / Panels](#);

New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

Calculated Mw PTM

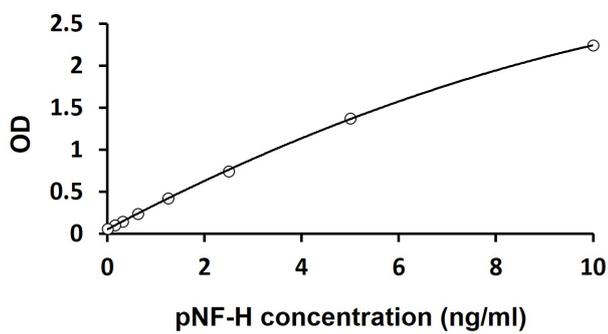
110 kDa

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 coincidentally with a change in the neurofilament function.

Phosphorylated in the head and rod regions by the PKC kinase PKN1, leading to the inhibition of polymerization.

Images



ARG81164 Phosphorylated Neurofilament NF-H ELISA Kit standard curve image

ARG81164 Phosphorylated Neurofilament NF-H ELISA Kit results of a typical standard run with optical density reading at 450 nm.
