

# Product datasheet

info@arigobio.com

ARG41473 Package: 100 µl store at: -20°C Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Neurofilament NF-M phospho (Ser614 / Ser619)

Tested Reactivity Hu

Tested Application IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name Neurofilament NF-M

Species Human

Immunogen Phosphospecific peptide around Ser614 / Ser619 of Human Neurofilament NF-M.

Conjugation Un-conjugated

Alternate Names Neurofilament medium polypeptide; Neurofilament 3; Neurofilament triplet M protein; NFM; NF-M;

160 kDa neurofilament protein; NEF3

## **Application Instructions**

| Application table | Application  | Dilution       |
|-------------------|--|----------------|
|                   | IHC-P  | 1:50           |
|                   | WB   | 1:250 - 1:1000 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                |

### **Properties**

Form Liquid

Purification Affinity purified.

Buffer 50 mM Tris-Glycine (pH 7.4), 150 mM NaCl, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.

Preservative 0.01% Sodium azide

Stabilizer 40% Glycerol and 0.05% BSA

Concentration Batch dependent

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol NEFM

Gene Full Name neurofilament, medium 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 medium neurofilament protein. This protein is commonly used as a biomarker of neuronal damage. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [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. [UniProt]

Research Area Controls and Markers antibody; Developmental Biology antibody; Neuroscience antibody; Signaling

Transduction antibody; Intermediate Neurofilament antibody

Calculated Mw 102 kDa

PTM There are a number of repeats of the tripeptide K-S-P, NFM is phosphorylated on a number of the

 $serines \ in \ this \ motif. \ It \ is \ thought \ that \ phosphorylation \ of \ NFM \ results \ in \ the \ formation \ of \ interfilament$ 

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. [UniProt]