




Product datasheet

Anti-Neurofilament antibody [NF421 + NFL/736] ab215903

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Overview

Product name	Anti-Neurofilament antibody [NF421 + NFL/736]
Description	Mouse monoclonal [NF421 + NFL/736] to Neurofilament
Host species	Mouse
Tested applications	Suitable for: Flow Cyt, ICC, IHC-P
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse, Chicken, Pig 
Immunogen	Recombinant full length protein corresponding to Human Neurofilament aa 1 to the C-terminus. Database link: P12036  Run BLAST with  Run BLAST with
Positive control	Human and rat cerebellum tissues. HEK293 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> <p>Please note that this antibody is an oligoclonal antibody. It is a cocktail of monoclonal antibodies that have been carefully selected. Oligoclonal antibodies have not only the specificity and batch-to-batch consistency of a monoclonal antibody, but also have the advantage of the sensitivity of a polyclonal antibody due to their ability to recognize multiple epitopes on an antigen.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide

	Constituents: 0.05% BSA, 99% PBS
Purity	Protein A/G purified
Purification notes	ab215903 is purified from Bioreactor Concentrate by Protein A/G.
Clonality	Monoclonal
Clone number	NF421 + NFL/736
Isotype	IgG1

Applications

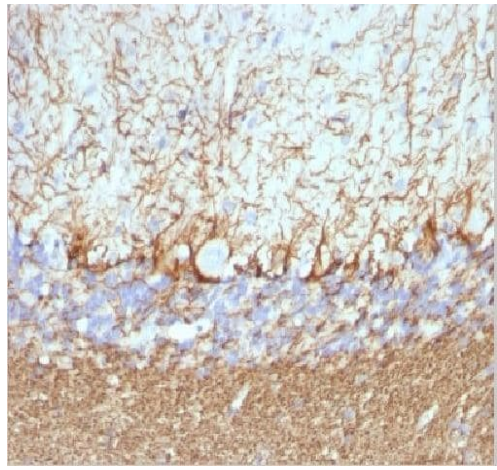
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab215903 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 1-2µg for 10 ⁶ cells.
ICC		Use a concentration of 1 - 2 µg/ml.
IHC-P		Use a concentration of 0.25 - 0.5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

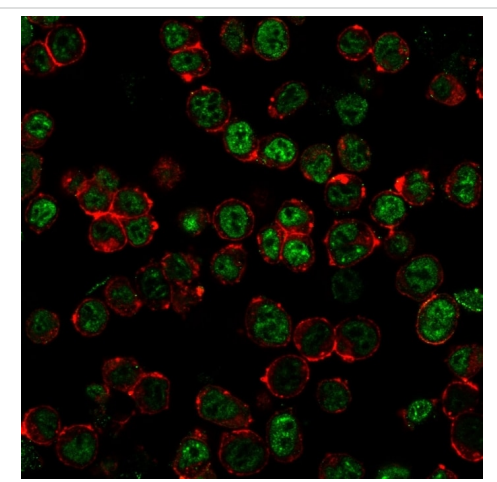
Function	Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber.
Sequence similarities	Belongs to the intermediate filament family.
Post-translational modifications	<p>There are a number of repeats of the tripeptide K-S-P, 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.</p> <p>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



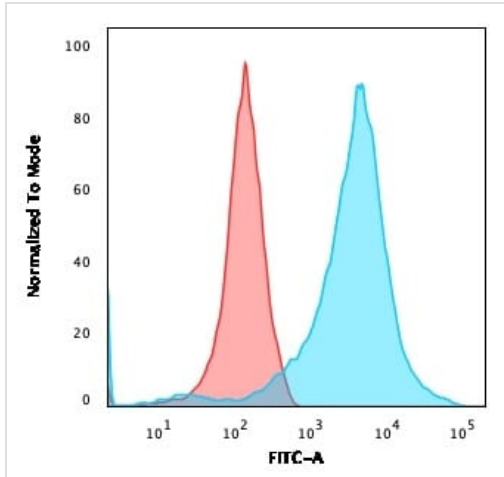
Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat cerebellum tissue labeling Neurofilament with ab215903 at 1 μ g/ml dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurofilament antibody [NF421 + NFL/736] (ab215903)



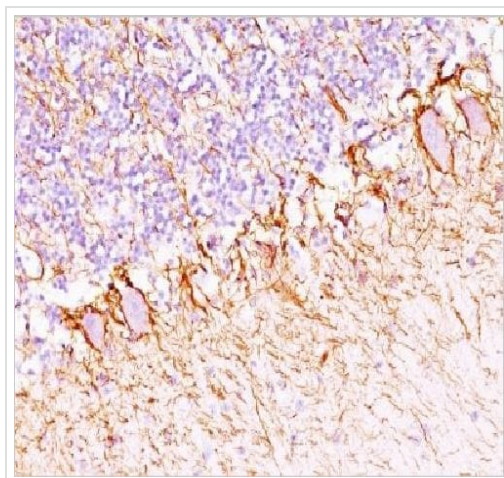
Immunofluorescence staining of HEK293 cells using ab215903 followed by goat anti-Mouse IgG conjugated to CF488 (green). Membrane stained with Phalloidin (Red).

Immunocytochemistry - Anti-Neurofilament antibody [NF421 + NFL/736] (ab215903)



Flow Cytometric Analysis of HEK293 cells using ab215903 followed by goat anti-Mouse IgG-CF488 (Blue); Isotype control (Red).

Flow Cytometry - Anti-Neurofilament antibody
[NF421 + NFL/736] (ab215903)



Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human cerebellum tissue labeling Neurofilament with ab215903 at 1 µg/ml dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurofilament antibody
[NF421 + NFL/736] (ab215903)

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