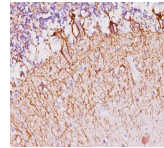


# Neurofilament Monoclonal Mouse Antibody (NF421)



## Product Description

This MAb reacts with a 200 kDa protein, identified as heavy sub-unit of neurofilaments (NF-H). Neurofilaments make up the main structural elements of axons and dendrites and are found in neurons, peripheral nerves, and sympathetic ganglion cells. Neurofilaments consist of three major subunits with molecular weights of 68 kDa (NF-L), 160 kDa (NF-M) and 200 kDa (NF-H). Anti-neurofilament stains a number of neural, neuroendocrine, and endocrine tumors. Neuromas, ganglioneuromas, gangliogliomas, ganglioneuroblastomas, and neuroblastomas stain positively for anti-neurofilament. Neurofilaments are also present in paragangliomas as well as adrenal and extra-adrenal pheochromocytomas. Carcinoids, neuroendocrine carcinomas of the skin, and oat cell carcinomas of the lung also express neurofilament. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0421, Anti-Neurofilament (NF421)**

## Product attributes

Antibody number	#0421
Antibody reactivity (target)	Neurofilament
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	NF421
Isotype	IgG1
Molecular weight	200 kDa
Synonyms	NEFH; Neurofilament H; Neurofilament Heavy Polypeptide 200kDa; Neurofilament Triplet H Protein; NF-H; NF200
Human gene symbol	NEFH
Entrez gene ID	4744
SwissProt	P12036
Unigene	198760
Immunogen	Human recombinant neurofilament protein
Antibody target cellular localization	Cytoskeleton
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified), WB (verified)
Species reactivity	Chicken, Human, Mouse, Pig, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Brain, Neuroblastoma
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Cytoskeleton, Neuroscience
Cell/tissue expression	Neuroendocrine cells, Neurons
Tumor expression	Lung cancer, Neuroendocrine cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

## Dye Features

[CF®405S Features](#)

[CF®488A Features](#)

[CF®568 Features](#)

[CF®594 Features](#)

[CF®640R Features](#)

[CF®647 Features](#)

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