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Neurofilament L

Cat.No. 171 003BT; Polyclonal rabbit antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μg purified IgG, lyophilized, biotin-labeled For reconstitution add 100 μl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1: 500 up to 1: 1000 (AP staining) (see remarks) IP: not tested yet ICC: 1: 100 (see remarks) IHC: 1: 100 IHC-P/FFPE: 1: 100 up to 1: 500
Label	biotin
Immunogen	Recombinant protein corresponding to AA 1 to 376 from human Neurofilament L (UniProt Id: P07196) with AA 200-292 missing. Immunogen corresponds to AA 1 to 284 in AAH66952.1
Reactivity	Reacts with: human (P07196), rat (P19527), mouse (P08551). Other species not tested yet.
Specificity	Specific for neurofilament L.
Remarks	WB : This antibody is less sensitive than the crude rabbit antiserum (cat. no. 171 002)
	ICC: Methanol fixation is recommended.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Neurofilaments are exclusively expressed in nerve cells and are the major structural component of large-diameter myelinated axons. They are predominatly composed of three proteins, Neurofilament H, L and M and are among the most highly phosphorylated neuronal proteins.

Selected General References

New movements in neurofilament transport, turnover and disease.

Barry DM, Millecamps S, Julien JP, Garcia ML

Experimental cell research (2007) 313(10): 2110-20.

Regulation between O-GlcNAcylation and phosphorylation of neurofilament-M and their dysregulation in Alzheimer disease. Deng Y, Li B, Liu F, Igbal K, Grundke-Igbal I, Brandt R, Gong CX

FASEB journal: official publication of the Federation of American Societies for Experimental Biology (2008) 22(1): 138-45.

CSF neurofilament proteins in the differential diagnosis of dementia.

de Jong D, Jansen RW, Pijnenburg YA, van Geel WJ, Borm GF, Kremer HP, Verbeek MM

Journal of neurology, neurosurgery, and psychiatry (2007) 78(9): 936-8.

14-3-3 protein binds to the low molecular weight neurofilament (NFL) mRNA 3' UTR.

Ge WW, Volkening K, Leystra-Lantz C, Jaffe H, Strong MJ

Molecular and cellular neurosciences (2007) 34(1): 80-7.

Differential subcellular localization of phosphorylated neurofilament and tau proteins in degenerating neurons of the human entorhinal cortex.

Porchet R, Probst A, Dráberová E, Dráber P, Riederer IM, Riederer BM

Neuroreport (2003) 14(7): 929-33.

Influence of the axotomy to cell body distance in rat rubrospinal and spinal motoneurons: differential regulation of GAP-43, tubulins, and neurofilament-M.

Fernandes KJ, Fan DP, Tsui BJ, Cassar SL, Tetzlaff W

The Journal of comparative neurology (1999) 414(4): 495-510.

Neurofilament protein is differentially distributed in subpopulations of corticocortical projection neurons in the macaque monkey visual pathways.

Hof PR, Ungerleider LG, Webster MJ, Gattass R, Adams MM, Sailstad CA, Morrison JH

The Journal of comparative neurology (1996) 376(1): 112-27.

Differential dynamics of neurofilament-H protein and neurofilament-L protein in neurons.

Takeda S, Okabe S, Funakoshi T, Hirokawa N

The Journal of cell biology (1994) 127(1): 173-85.

Neurofilament immunoreactivity in myenteric neurons differs from that found in the central nervous system.

Eaker EY, Shaw G, Sninsky CA

Gastroenterology (1990) 99(5): 1364-71.

Intermediate filaments in nervous tissues.

Liem RK, Yen SH, Salomon GD, Shelanski ML

The Journal of cell biology (1978) 79(3): 637-45.