

Neurofilament M

Cat.No. 171 206; Polyclonal chicken antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg purified IgY, lyophilized. Ovalbumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Before storing at -20°C add 1 vol of glycerol.
Applications	WB: not recommended IP: not tested yet ICC: 1 : 500 IHC: 1 : 500 (see remarks) IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 763 to 848 from mouse Neurofilament M (UniProt Id: P08553)
Reactivity	Reacts with: mouse (P08553), rat (P12839). Other species not tested yet.
Specificity	Specific for neurofilament M
Remarks	IHC: The antibody shows some unspecific blood vessel staining in some brain regions.

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 predominately 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, Iqbal K, Grundke-Iqbal 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, Leysstra-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.