



# Anti-Pan-Neuronal Neurofilament Marker monoclonal antibody, clone TNJ-312 (DMAB7133)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Mouse monoclonal to human pan-neuronal neurofilament marker.
<b>Antigen Description</b>	Neurofilaments are the 10 nanometer (10nm) intermediate filaments found specifically in neurons. They are a major component of the cell's cytoskeleton, and provide support for normal axonal radial growth (i.e. increases in axon's diameter). Neurofilaments are composed of polypeptide chains or subunits that are related structurally to the intermediate filaments of other tissues such as keratin subunits, which make 10nm filaments expressed specifically in epithelia. The family of proteins making intermediate filaments is divided into 5 major classes, the keratins forming the classes I and II. Class III contains the proteins Vimentin, Desmin, Peripherin and Glial Fibrillary Acidic Protein (GFAP). The major neurofilament subunits occupy the class IV family of intermediate filaments. Finally class V contains the nuclear lamins.
<b>Specificity</b>	TNJ-312 has been selected to provide a specific marker for neurons in tissue sections and cultures. In contrast to individual antineurofilaments that identify different subset of neurons and are, therefore, especially suitable for defining anato
<b>Isotype</b>	IgG1 and IgM Cocktail
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	TNJ-312
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC, ELISA

<b>Format</b>	Scites Fluid (contains 0.01M sodium azide)
<b>Size</b>	500 µl
<b>Preservative</b>	0.01M Sodium Azide
<b>Storage</b>	Store at -20°C. Upon initial thawing, apportion into working aliquots and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody. For long-term storage, keep the antibody at -80°C.

## BACKGROUND

<b>Introduction</b>	Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber. The extra mass and high charge density that distinguish the neurofilament proteins from all other intermediate filament proteins are due to the tailpiece extensions. This region may form a charged scaffolding structure suitable for interaction with other neuronal components or ions.
<b>Keywords</b>	150kDa medium; 160 kDa neurofilament protein; 200 kDa neurofilament protein; 68 kDa neurofilament protein; A1847934; CMT1F; CMT2E; FLJ53642; Micro glutamic acid-rich protein; mKIAA0845; Nef3; Nefm; Neurofilament 3; Neurofilament heavy polypeptide 200kDa;