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CD171 / NCAM-L1 (Axonal Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM275]
Catalog # AH10582

Product Information

Application	IF, FC
Primary Accession	P32004
Other Accession	3897, 52818
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	SPM275
Calculated MW	140003

Additional Information

Gene ID	3897
Other Names	Neural cell adhesion molecule L1, N-CAM-L1, NCAM-L1, CD171, L1CAM, CAML1, MIC5
Application Note	IF~~1:50~200 FC~~1:10~50
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD171 / NCAM-L1 (Axonal Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	L1CAM
Synonyms	CAML1, MIC5
Function	Neural cell adhesion molecule involved in the dynamics of cell adhesion and in the generation of transmembrane signals at tyrosine kinase receptors. During brain development, critical in multiple processes, including neuronal migration, axonal growth and fasciculation, and synaptogenesis. In the mature brain, plays a role in the dynamics of neuronal structure and function, including synaptic plasticity.

Cellular Location	Cell membrane; Single-pass type I membrane protein {ECO:0000250|UniProtKB:Q05695}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q05695}. Cell projection, axon. Cell projection, dendrite Note=Colocalized with SHTN1 in close apposition with actin filaments in filopodia and lamellipodia of axonalne growth cones of hippocampal neurons (By similarity). In neurons, detected predominantly in axons and cell body, weak localization to dendrites (PubMed:20621658) {ECO:0000250|UniProtKB:Q05695, ECO:0000269|PubMed:20621658}

Background

Recognizes a cell surface protein of 220-240kDa, identified as L1 cell adhesion molecule. The L1CAM gene, which is located in Xq28, is involved in three distinct conditions: 1) HSAS (hydrocephalus-stenosis of the aqueduct of Sylvius); 2) MASA (mental retardation, aphasia, shuffling gait, and adducted thumbs); and 3) SPG1 (spastic paraplegia). The L1, neural cell adhesion molecule (L1CAM) also plays an important role in axon growth, fasciculation, and neural migration as well as in mediating neuronal differentiation. Expression of L1 protein is restricted to tissues arising from neuroectoderm. This MAb is useful in the identification of primitive neuroectodermal tumors. It binds to tumors of neuroectodermal and glial origin e.g. neuroblastoma and Schwannomas. It does not bind to pediatric or adult brain.

References

Kemshead J, et. al. International J Cancer, 1983; 31:187-195. | Patel, et. al. Biochem Soc Transactions, 1990; 18:274

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