

CD171 / NCAM-L1 (Axonal Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone SPM275] Catalog # AH10582

Specification

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

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IF, FC <u>P32004</u> <u>3897, 52818</u> Human Mouse Monoclonal Mouse / IgG1, kappa 220-240kDa KDa

CD171 / NCAM-L1 (Axonal Marker) Antibody - With BSA and Azide - 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<br \>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.

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

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

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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

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

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

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