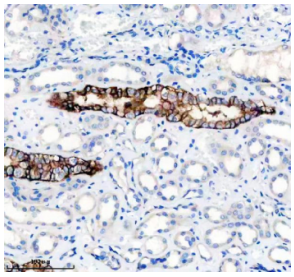
NCAM-L1 Antibody AAFD-12 / L1CAM Neural Adhesion Protein Antibody [clone AAFD-12] (FY13410)

Catalog No.	Formulation	Size
FY13410	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

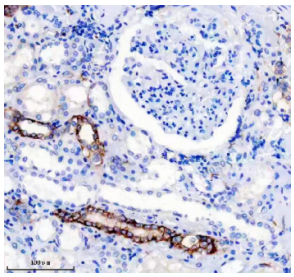
Recombinant RABBIT MONOCLONAL

Bulk quote request

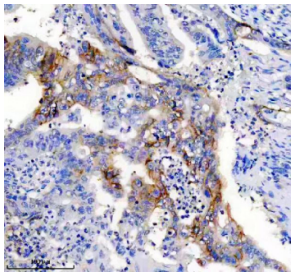
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AAFD-12
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P32004
Localization	Cytoplasmic, cell membrane
Applications	Western Blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200
Limitations	This NCAM-L1 Antibody AAFD-12 / L1CAM Neural Adhesion Protein Antibody is available for research use only.



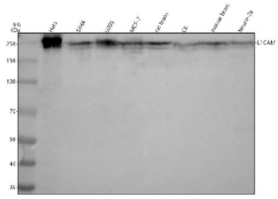
NCAM-L1 Antibody Human Kidney Renal Tubule IHC. Immunohistochemistry staining of FFPE human kidney tissue with NCAM-L1 Antibody AAFD-12 / L1CAM Neural Adhesion Protein Antibody. Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in EDTA buffer, pH 8, for 20 min followed by cooling before staining. HRP-conjugated secondary antibody and DAB substrate were used for detection. Strong NCAM-L1 staining is observed in a subset of renal tubular epithelial cells.



NCAM-L1 Antibody Human Kidney Glomerular and Renal Tubule IHC. Immunohistochemistry staining of FFPE human kidney tissue with NCAM-L1 Antibody / L1CAM Neural Adhesion Protein Antibody. Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in EDTA buffer, pH 8, for 20 min followed by cooling before staining. HRP-conjugated secondary antibody and DAB substrate were used for detection. Strong NCAM-L1 staining is observed in a subset of renal tubular epithelial cells adjacent to the glomerulus.



NCAM-L1 Antibody Human Colon Cancer Tumor Cell IHC. Immunohistochemistry staining of FFPE human colon cancer tissue with NCAM-L1 Antibody / L1CAM Neural Adhesion Protein Antibody. Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in EDTA buffer, pH 8, for 20 min followed by cooling before staining. HRP-conjugated secondary antibody and DAB substrate were used for detection. NCAM-L1 staining is observed in tumor cell populations within the colon cancer tissue.



NCAM-L1 Antibody Human, Mouse and Rat WB. Western blot analysis of human HeLa, SiHa, U-2 OS and MCF7, rat brain and C6, and mouse brain and Neuro-2a cell lysates using NCAM-L1 Antibody / L1CAM Neural Adhesion Protein Antibody. The predicted molecular weight of unglycosylated L1CAM is approximately 140 kDa. A prominent band is detected at approximately 250 kDa, consistent with heavily glycosylated L1CAM. A lower molecular weight band may represent processed or partially glycosylated L1CAM species. This NCAM-L1 Antibody supports detection of the L1CAM neural adhesion protein in human, mouse and rat samples.

Description

NCAM-L1 Antibody AAFD-12 / L1CAM Neural Adhesion Protein Antibody, clone AAFD-12, is a recombinant rabbit monoclonal antibody that recognizes L1CAM, a transmembrane cell adhesion protein with important functions in the development and organization of the nervous system. Also known as NCAM-L1, CD171 and L1 Cell Adhesion Molecule, L1CAM belongs to the immunoglobulin superfamily of cell adhesion molecules. The protein mediates interactions between cells and their extracellular environment and contributes to signaling processes that regulate neuronal morphology, movement and connectivity.

NCAM-L1 is particularly important during nervous system development. L1CAM-mediated interactions contribute to neuronal migration, neurite extension, axon guidance and axon fasciculation. The protein can participate in both homophilic interactions with other L1CAM molecules and heterophilic interactions with other cell-surface and extracellular proteins. Through these interactions, the L1CAM neural adhesion protein helps developing neurons migrate to appropriate locations and establish organized neural connections.

The importance of NCAM-L1 in neural development is demonstrated by pathogenic variants in the L1CAM gene. These variants are associated with a group of X-linked neurological disorders collectively known as L1 syndrome. Clinical manifestations can include X-linked hydrocephalus, MASA syndrome and related abnormalities affecting nervous system development. L1CAM is therefore studied in research examining the molecular mechanisms connecting neural cell adhesion, neuronal migration and axonal development.

In addition to its functions in the nervous system, L1CAM is investigated extensively in cancer biology. Altered expression has been reported in multiple malignancies, where the protein has been associated with tumor cell adhesion, migration and invasive behavior. These observations have expanded interest in NCAM-L1 beyond developmental neuroscience and into studies of tumor progression and cell motility.

An NCAM-L1 Antibody can be used to investigate L1CAM neural adhesion protein expression, neuronal migration, axon development, nervous system biology and the involvement of L1CAM in cancer and other disease models.

Also known as CD171, NCAM-L1 and Neural Cell Adhesion Molecule L1, L1CAM is a cell adhesion protein involved in neuronal migration, axon development and nervous system function; additional target information is available on our L1CAM Antibody page.

Application Notes

Optimal dilution of the NCAM-L1 Antibody AAFD-12 / L1CAM Neural Adhesion Protein Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Neural cell adhesion molecule L1 protein was used as the immunogen for the NCAM-L1 antibody.

Storage

Store the NCAM-L1 antibody at -20oC.

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