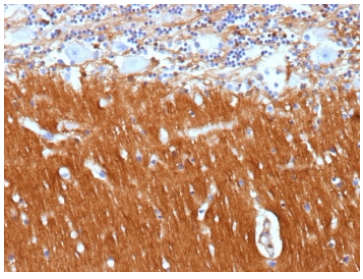
Neural Cell Adhesion Molecule L1 Antibody L1CAM/13053R / Recombinant Rabbit MAb [clone L1CAM/13053R] (V5759)

Catalog No.	Formulation	Size
V5759-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5759-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5759SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

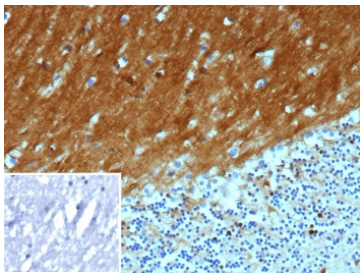
Recombinant RABBIT MONOCLONAL

Bulk quote request

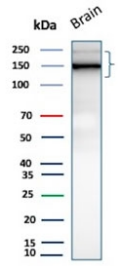
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	L1CAM/13053R
Purity	Protein A affinity
UniProt	P32004
Localization	Cell surface, Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This Neural Cell Adhesion Molecule L1 Antibody L1CAM/13053R is available for research use only.



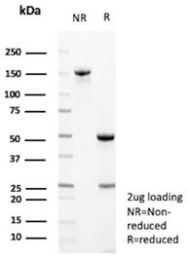
Neural Cell Adhesion Molecule L1 Antibody Human Brain Neuronal Tissue IHC. Immunohistochemistry staining of FFPE human brain tissue with Neural Cell Adhesion Molecule L1 Antibody (clone L1CAM/13053R). Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before staining. Strong L1CAM staining is observed throughout neuronal processes and surrounding neuropil within the human brain tissue.



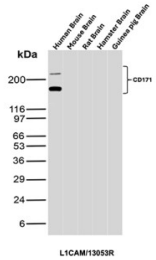
Neural Cell Adhesion Molecule L1 Antibody Human Brain with Negative Control IHC. Immunohistochemistry staining of FFPE human brain tissue with Neural Cell Adhesion Molecule L1 Antibody (clone L1CAM/13053R). Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before staining. Strong L1CAM staining is observed throughout neuronal processes and surrounding neuropil. Inset: secondary antibody negative control with PBS used in place of the primary antibody.



Neural Cell Adhesion Molecule L1 Antibody Human Brain WB. Western blot analysis of human brain tissue lysate using Neural Cell Adhesion Molecule L1 Antibody (clone L1CAM/13053R). The predicted molecular weight of L1CAM is approximately 140 kDa, with higher apparent molecular weight species observed up to approximately 240 kDa due to extensive glycosylation. This Neural Cell Adhesion Molecule L1 Antibody supports detection of glycosylated L1CAM in human brain tissue.



SDS-PAGE analysis of purified, BSA-free Neural cell adhesion molecule L1 antibody (clone L1CAM/13053R) as confirmation of integrity and purity.



Neural Cell Adhesion Molecule L1 Antibody L1CAM/13053R in WB. Western blot analysis of Human Brain, Mouse Brain, Rat Brain, Hamster Brain and Guinea pig Brain tissue lysates using NCAM L1 Antibody (clone L1CAM/13053R).

Description

Neural Cell Adhesion Molecule L1 Antibody L1CAM/13053R is a recombinant rabbit monoclonal antibody that recognizes L1CAM, a transmembrane glycoprotein with important roles in neuronal adhesion, migration and nervous system development. Encoded by the L1CAM gene, the protein is also commonly known as L1 Cell Adhesion Molecule, NCAM-L1 and CD171. L1CAM belongs to the immunoglobulin superfamily of cell adhesion molecules and mediates interactions between cells as well as interactions with components of the extracellular environment.

During nervous system development, L1CAM contributes to neuronal migration, neurite outgrowth, axon guidance and axon fasciculation. The protein can mediate homophilic adhesion through interactions between L1CAM molecules on neighboring cells and can also participate in heterophilic interactions with other cell-surface and extracellular proteins. These interactions help coordinate neuronal movement and the establishment of organized neural connections during development.

Neural Cell Adhesion Molecule L1 also participates in intracellular signaling through its cytoplasmic domain and its association with cytoskeletal and signaling proteins. These mechanisms connect extracellular adhesion events with changes in cell morphology and motility. The importance of L1CAM in neural development is further demonstrated by pathogenic variants in the L1CAM gene, which cause the spectrum of X-linked neurological disorders collectively known

as L1 syndrome.

Beyond neuroscience, L1CAM is an important research target in cancer biology. Altered expression has been reported in multiple tumor types and has been associated with changes in tumor cell adhesion, migration and invasive behavior. L1CAM expression is therefore investigated in studies examining how cell adhesion and motility contribute to tumor progression and disease biology.

A Neural Cell Adhesion Molecule L1 Antibody can be used to investigate L1CAM expression and its involvement in neuronal development, axon biology, cell adhesion, migration and cancer research.

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 Neural Cell Adhesion Molecule L1 Antibody L1CAM/13053R should be determined by the researcher.

Immunogen

A portion of amino acids 600-900 from human L1CAM protein was used as the immunogen for the Neural Cell Adhesion Molecule L1 Antibody.

Storage

Aliquot the Neural Cell Adhesion Molecule L1 Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Neural Cell Adhesion Molecule L1 antibody, L1CAM antibody, L1 Cell Adhesion Molecule antibody, NCAM-L1 antibody, CD171 antibody, L1 antibody

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