10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

L1CAM Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16222b

Product Information

Application	IHC-P, WB, E
Primary Accession	P32004
Other Accession	Q05695, P11627, NP_001137435.1
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21085
Calculated MW	140003
Antigen Region	1154-1182

Additional Information

Gene ID	3897
Other Names	Neural cell adhesion molecule L1, N-CAM-L1, NCAM-L1, CD171, L1CAM, CAML1, MIC5
Target/Specificity	This L1CAM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1154-1182 amino acids from the C-terminal region of human L1CAM.
Dilution	IHC-P~~1~600 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	L1CAM Antibody (C-term) 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}

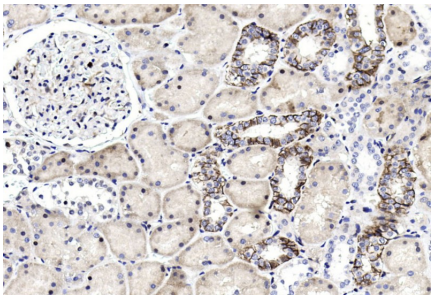
Background

L1CAM is an axonal glycoprotein belonging to the immunoglobulin supergene family. The ectodomain, consisting of several immunoglobulin-like domains and fibronectin-like repeats (type III), is linked via a single transmembrane sequence to a conserved cytoplasmic domain. This cell adhesion molecule plays an important role in nervous system development, including neuronal migration and differentiation. Mutations in the gene cause three X-linked neurological syndromes known by the acronym CRASH (corpus callosum hypoplasia, retardation, aphasia, spastic paraplegia and hydrocephalus). Alternative splicing of a neuron-specific exon is thought to be functionally relevant.

References

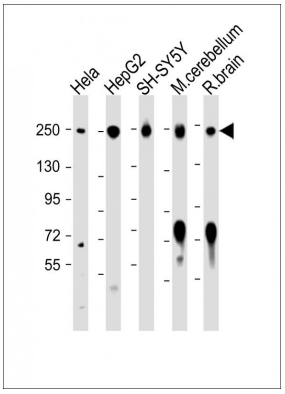
Schafer, M.K., et al. FEBS Lett. 584(21):4475-4480(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Bertolin, C., et al. J. Neurol. Sci. 294 (1-2), 124-126 (2010) :
Schafer, M.K., et al. Cell. Mol. Life Sci. 67(14):2425-2437(2010)
Gavert, N., et al. J. Cell. Sci. 123 (PT 12), 2135-2143 (2010) :

Images



Immunohistochemical analysis of paraffin-embedded Human kidney section using Pink1(Cat#AP16222b). AP16222b was diluted at 1~600 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

All lanes : Anti-L1CAM Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lane 4: mouse cerebellum lysate Lane 5: rat brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 220 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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