

Product datasheet for **UM500044CF**

L1CAM Mouse Monoclonal Antibody [Clone ID: UMAB48]

Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB48
Applications:	IF, IHC, WB
Recommended Dilution:	IHC 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human L1CAM (NP_000416) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	137.8 kDa
Gene Name:	L1 cell adhesion molecule
Database Link:	NP_000416 Entrez Gene 16728 Mouse Entrez Gene 50687 Rat Entrez Gene 3897 Human P32004



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Background:

The protein encoded by this gene 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. [provided by RefSeq, Jul 2008]

Synonyms:

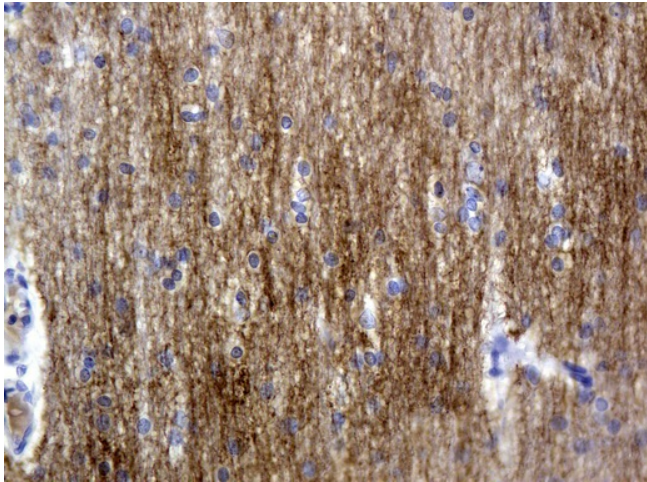
CAML1; CD171; HSAS; HSAS1; MASA; MIC5; N-CAM-L1; N-CAML1; NCAM-L1; S10; SPG1

Protein Families:

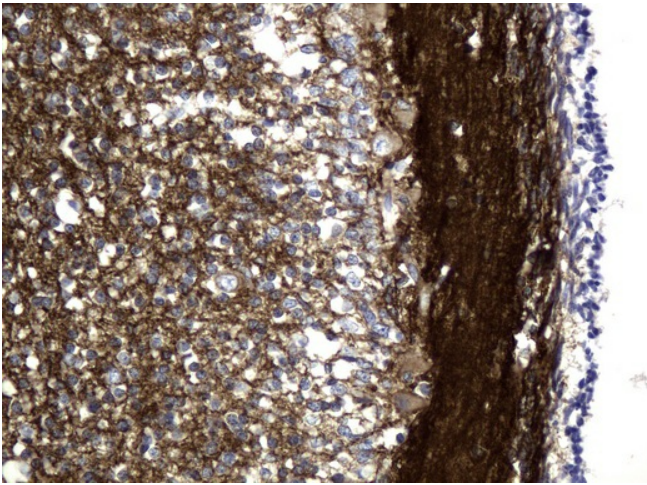
Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways:

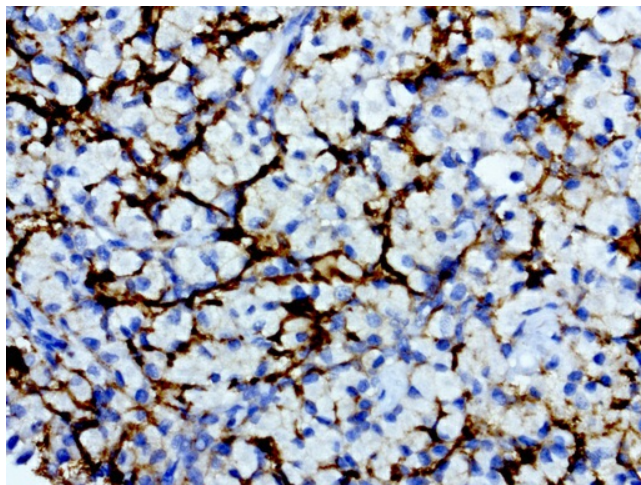
Axon guidance, Cell adhesion molecules (CAMs)

Product images:

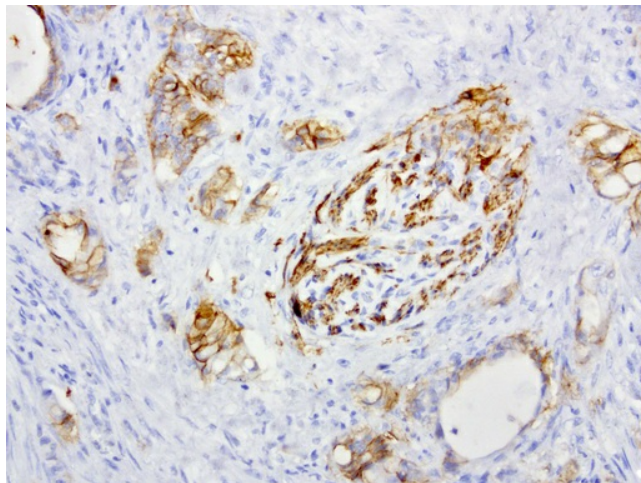
Immunohistochemical staining of paraffin-embedded Human adult brain tissue using anti-L1CAM mouse monoclonal antibody. ([UM500044]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



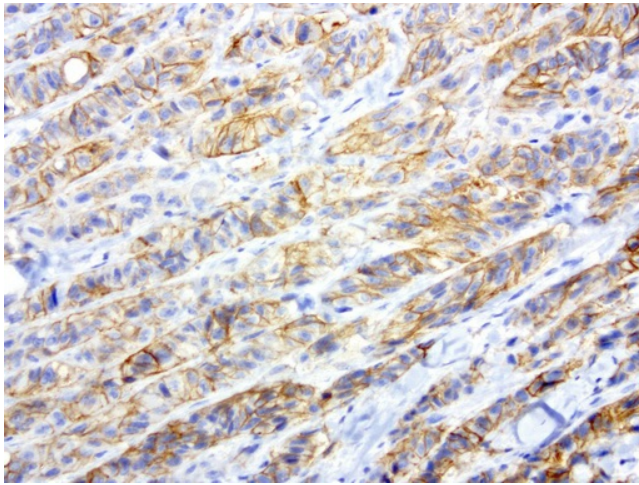
Immunohistochemical staining of paraffin-embedded Human embryonic cerebellum using anti-L1CAM mouse monoclonal antibody ([UM500044]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



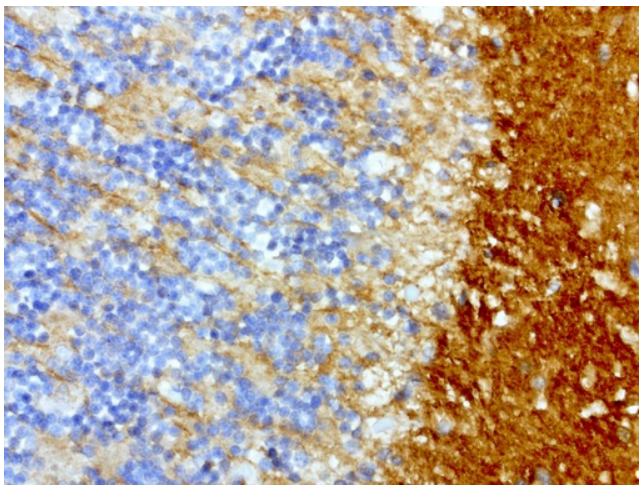
Immunohistochemical staining of paraffin-embedded human pituitary using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows only a subset of cells with positive cytoplasmic and membraneous stain.



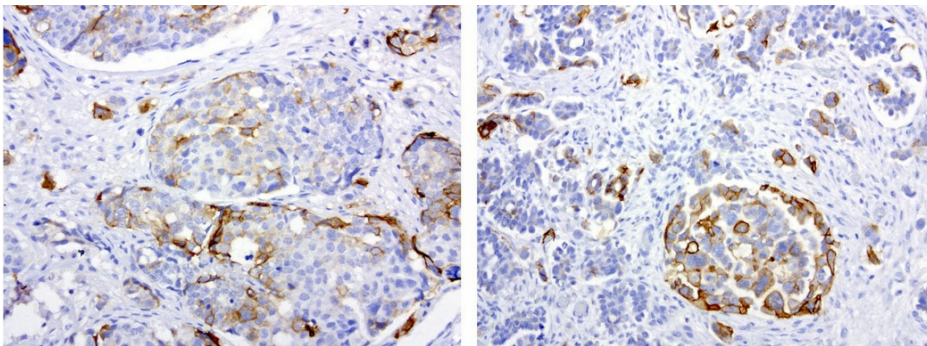
Immunohistochemical staining of paraffin-embedded human colon cancer using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows tumor cells with positive cytoplasmic and membraneous stain.



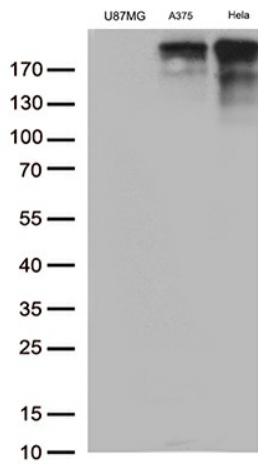
Immunohistochemical staining of paraffin-embedded human melanoma using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows strong positive membrane and cytoplasmic staining in the tumor cells.



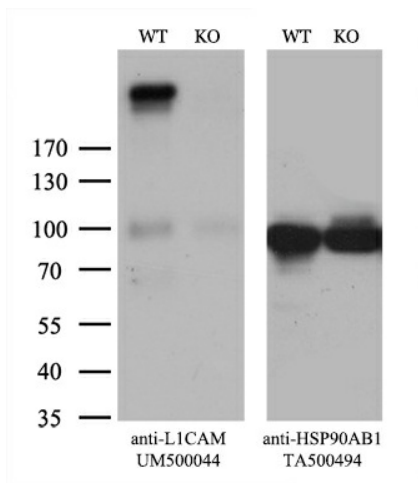
Immunohistochemical staining of paraffin-embedded human brain using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows positive cytoplasmic and membrane stain granular layer and molecular layer.



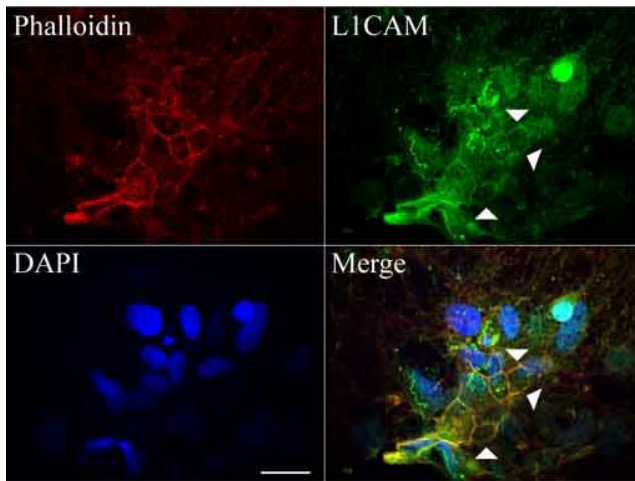
Immunohistochemical staining of paraffin-embedded human ovarian carcinoma using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows positive cytoplasmic and membrane stain in a subset of the tumor cells.



Western blot analysis of extracts (35ug) from 3 cell line lysates by using anti-L1CAM monoclonal antibody (1:500).



Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and L1CAM-Knockout HeLa cells (KO, Cat# [LC832196]) were separated by SDS-PAGE and immunoblotted with anti-L1CAM monoclonal antibody [UM500044] (1:2000 `). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



Confocal immunofluorescence image of primary rat neurons labeled with anti-L1CAM mouse monoclonal antibody ([UM500044], green, 1:50). Actin filaments were labeled with TRITC-Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 20µm.