

# **Product datasheet for UM570044**

## OriGene Technologies, Inc.

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### 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:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.5~1.0 mg/ml (Lot Dependent)

**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 MouseEntrez Gene 50687 RatEntrez Gene 3897 Human

P32004





### L1CAM Mouse Monoclonal Antibody [Clone ID: UMAB48] - UM570044

Background:

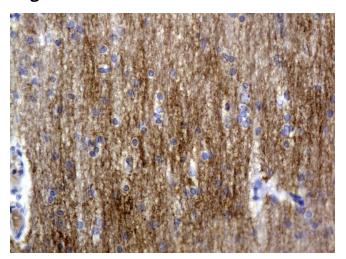
The protein encoded by this gene is an axonal glycoprotein belonging to the immunoglobulin supergene family. The ectodomain, consisting of several immunoglobulin-like domains and fibronectin-like repeats (type III), is linked via a single transmembrane sequence to a conserved cytoplasmic domain. This 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

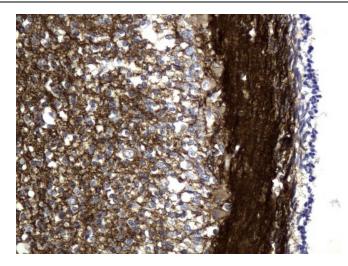
**Protein Pathways:** Axon guidance, Cell adhesion molecules (CAMs)

## **Product images:**

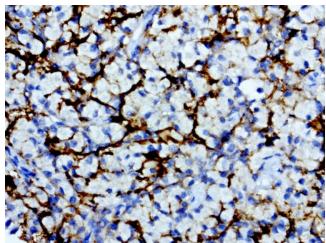


Immunohistochemical staining of paraffinembedded Human adult brain tissue using anti-L1CAM mouse monoclonal antibody. ([UM500044]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

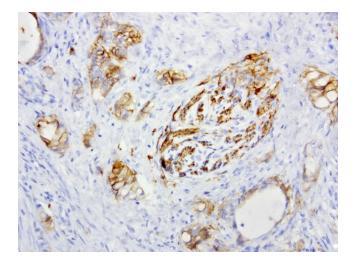




Immunohistochemical staining of paraffinembedded Human embryonic cerebellum using anti-L1CAM mouse monoclonal antibody. ([UM500044]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

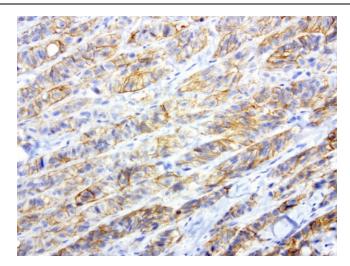


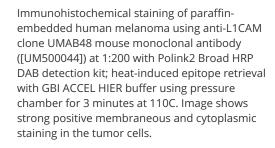
Immunohistochemical staining of paraffinembedded human pituitary using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows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

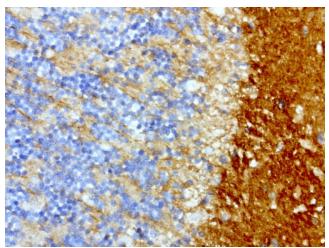


Immunohistochemical staining of paraffinembedded human colon cancer using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows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

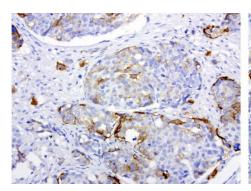


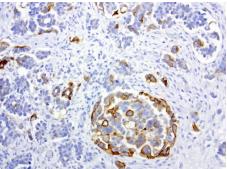






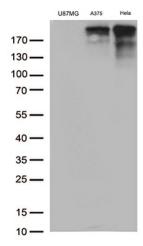
Immunohistochemical staining of paraffinembedded human brain using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image shows positive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



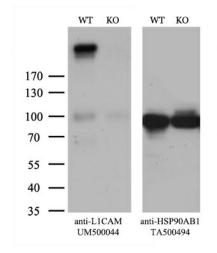


Immunohistochemical staining of paraffinembedded human ovarian carcinoma using anti-L1CAM clone UMAB48 mouse monoclonal antibody ([UM500044]) at 1:200 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL HIER buffer using pressure chamber for 3 minutes at 110C. Image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

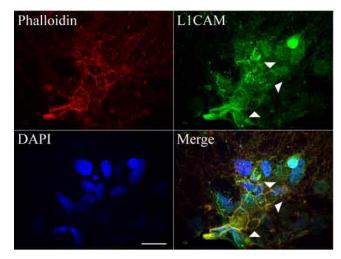




Western blot analysis of extracts (35ug) from 3 cell line lysates by using anti-L1CAM monoclonal antibody (1:500).



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