

Background

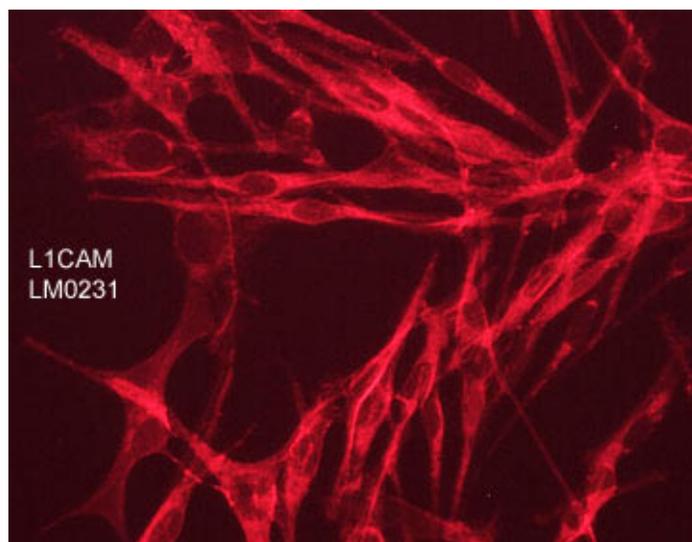
The neural cell adhesion molecule L1 (L1CAM/NCAM-L1/CD171) is a single pass transmembrane glycoprotein member of the immunoglobulin superfamily that contains six Ig-like domains and five fibronectin type-III domains in the extracellular region. L1CAM is mainly expressed in the brain where it has important roles in the developing nervous system. L1CAM has been implicated in neuronal migration and adhesion, axon myelination and fasciculation, and neurite outgrowth. Mutations in the L1CAM gene cause varying degrees of neurological disease including X-linked hydrocephalus, MASA syndrome, spastic paraplegia type 1, and X-linked corpus callosum agenesis. Apart from the nervous system, L1CAM is overexpressed in many cancers and supports a poor prognosis by facilitating aggressive tumor growth, metastasis, and chemoresistance.



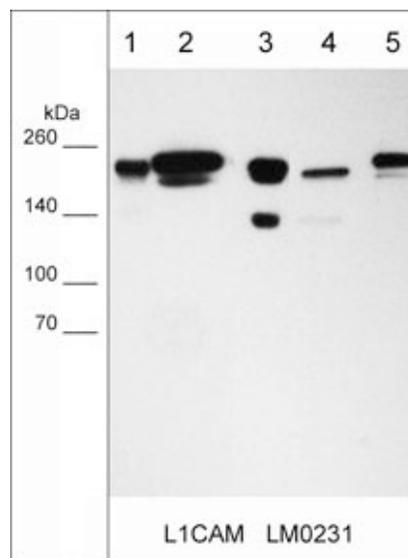
**Guaranteed
to
Outperform**

Background References

- Moos, M. et al. (1988) Nature. 334:701.
Hortsch, M. (1996) Neuron. 17:587.
Angiolini F, Cavallaro U (2017) Int J Mol Sci 18(2)pii:E254.



Immunocytochemical labeling of L1CAM in paraformaldehyde fixed human MeWo cells. The cells were labeled with mouse monoclonal anti-L1CAM (LM0231). The antibody was detected using goat anti-mouse Ig DyLight® 594.



Western blot analysis of human MDA-MB-231 cells (lane 1), MeWo cells (lane 2), human brain tissue (lane 3), A431 cells (lane 4), and MCF7 cells (lane 5). The blot was probed with mouse monoclonal anti-L1CAM (LM0231) at 1:1000.

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Immunogen

Uniprot ID: P32004

Clone (M023) was generated from a proprietary antigen related to the native human L1CAM expressed in the MeWo melanoma cell line.

Buffer and Storage

Mouse monoclonal antibody purified with protein G chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

Applications

WB 1:1000
 ELISA (Cap) 1:100
 ICC 1:100
 IP 1:100

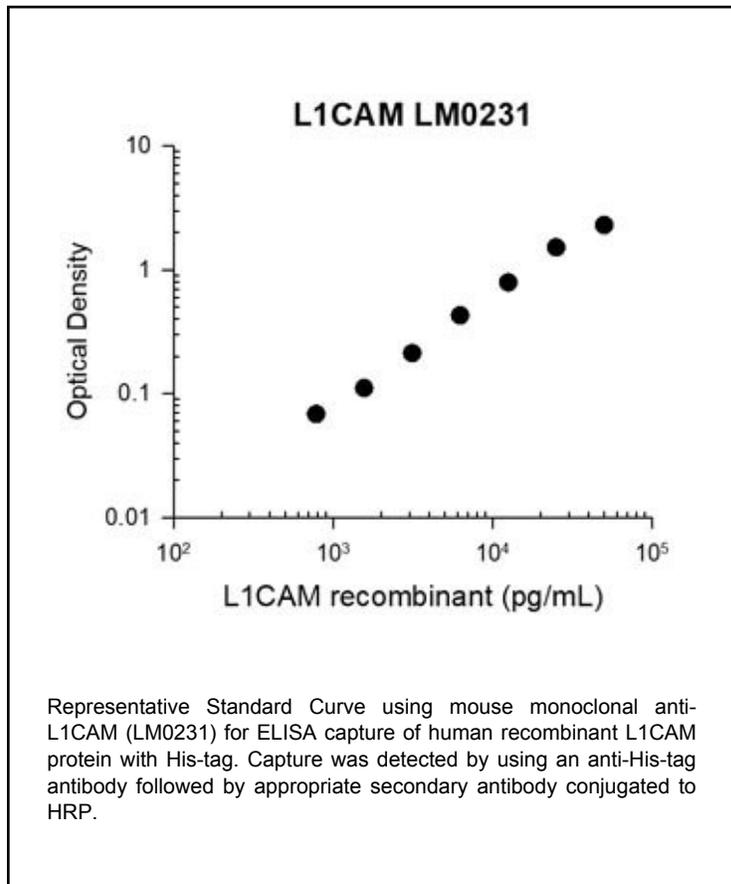
Species Reactivity

Hu

Isotype: IgG1

End user should determine optimal dilution for their particular applications. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, Tris buffer, 0.04% Tween20 for 1 hour at room temperature.

Abbreviations: E = ELISA, ELISA (Cap) = ELISA Capture ICC = immunocytochemistry, IHC = immunohistochemistry, IP = immunoprecipitation, MS = mass spectrometry, WB = western blot.
 Hu = Human, Ms = Mouse, Rt = Rat, Ck = Chicken, F = Frog, B = Bovine



Specificity

Clone M023 mouse monoclonal antibody detects a 230 kDa* protein on SDS-PAGE immunoblots of human MeWo, MDA-MB-231, A431, and MCF7 cells, as well as human brain tissue. The antibody works for western blot, immunoprecipitation, ELISA, and immunocytochemistry, as well as detects L1CAM on live cells.

*All molecular weights (MW) are confirmed by comparison to MW standards and to western blot mobilities of known proteins with similar MW. "Native" western blot utilizes non-reducing sample buffer (no mercaptoethanol or SDS), normal SDS-PAGE gel electrophoresis, and no methanol in transfer buffers.

Related Products

- CM0071 CD44 (Extracellular region) Mouse Monoclonal
- CM0021 CD55 (Extracellular region) Mouse Monoclonal
- CM0011 CD98 (Extracellular region) Mouse Monoclonal
- CM5881 CD44 (Hyaluron Binding Region) Mouse Monoclonal
- NM5341 Neuropilin-1 (a1 CUB Domain) Mouse Monoclonal
- PM5351 Plexin A1 (Sema Domain) Mouse Monoclonal



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