Product Information

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Anti-L1CAM antibody, Mouse monoclonal
clone UJ127.11, purified from hybridoma cell culture

Product Number **L4543**

Product Description

Anti-L1CAM antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the hybridoma UJ127.11 produced by the fusion of mouse myeloma cells (P3-X63-Ag8-653 cells) and splenocytes from mice immunized with human fetal brain.[1] The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2.

Anti-L1CAM antibody, Mouse monoclonal recognizes human L1CAM, 220-240 kDa.[1, 2] The antibody may be used in immunoblotting,[1, 4] immunoprecipitation,[2] immunocytochemistry,[2] flow cytometry,[3] and immunohistochemistry.[1]

L1CAM protein belongs to the family of cell adhesion molecules (CAM) and is critical for CNS development in humans. This protein is responsible for many activities among them: neurite outgrowth, adhesion, fasciculation, migration, myelination, and axon guidance. These activities are mediated by the interaction of L1CAM with various members of the CAM protein family, extracellular matrix molecules and signaling receptors, through interactions that involve the extracellular domain of L1CAM.[5-8] The extracellular part of the protein contains eleven tandem immunoglobulin-like (Ig) domains. Human L1CAM was isolated from a human fetal brain cDNA library using a probe that corresponds to highly conserved regions in mouse and rat L1CAM. The human L1CAM cDNA encodes a protein of 1256 amino acids with a 92% sequence identity with mouse L1CAM. Mutations in the L1CAM gene may cause several brain disorders such as type 1 X-linked spastic paraplegia (SPG1), MASA syndrome, and ACC (agenesis of corpus callosum).[5-8]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody concentration: ~2 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 0.25-0.5 μg/mL is recommended using cell extracts of G361 cells (human melanoma).

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

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6. Hlavin, M.L., and Lemmon, V., *Genomics*, **11**, 416-423 (1991).
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