Human LAMP Alexa Fluor® 700-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF873N
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LAMP in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LAMP Val29-Asn315 Accession # AAC50569
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LAMP (limbic system-associated membrane protein) is a member of the IgLON (immunoglobulin LAMP, OBCAM and neurotrimin) subfamily within the Ig superfamily. All IgLON family members are glycosylphosphatidylinositol (GPI)-anchored neural cell adhesion molecules that are involved in cell-cell recognition and may have a role in mediating selective neuronal growth and axon targeting. LAMP cDNA encodes a 338 amino acid (aa) residues precursor protein containing a 28 aa N-terminal signal peptide, a 23 aa C-terminal propeptide and a 287 aa mature chain with 3 Ig-like C2-type domains and a GPI-anchor attachment site. In the developing brain, LAMP exhibits a specific pattern of expression in the cortical and subcortical limbic areas, which are important in cognition, emotion, memory, and learning. LAMP is also expressed in single layers of the superior colliculus, spinal chord and cerebellum. LAMP promotes adhesion and growth of limbic axons primarily via homophilic interaction and in part by modulating calcium influx through L-type calcium channels in limbic neurons. Heterophilic interactions between LAMP and neurotrimin have also been demonstrated. LAMP has been shown to inhibit the outgrowth of neurotrimin-expressing dorsal root ganglion neurons in a heterophilic manner. Antibody perturbation studies showed that LAMP is necessary for normal circuit formation in the limbic system, including the septo-hippocampal connection and hippocampal mossy fibers. LAMP acts as an attractive guidance signal for the limbic thalamic axons and can induce branch formation, but also acts as a repulsive axon guidance signal for nonlimbic thalamic axons (1-5).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475