Human LAMP Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 110722

Catalog Number: FAB8731R

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LAMP in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 110722
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LAMP Val29-Asn315 Accession # AAC50569
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.*

Neutralization	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

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