Technical Data Sheet

Purified Mouse Anti-Human Lamp-1

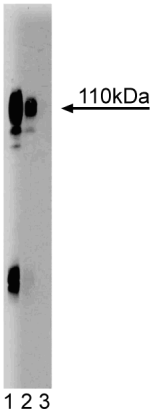
Product Information

Material Number:	**611043**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	25/Lamp-1
Immunogen:	Human Lamp-1 aa. 25-224
Isotype:	Mouse IgG2b
Reactivity:	QC Testing: Human
Target MW:	110 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Lysosomes are digestive compartments in mammalian cells that are responsible for the degradation of numerous substances including foreign materials. The lysosomal membrane is of interest due to its role in maintaining the acidic intralysosomal sac, its resistance to degradation, and its ability to fuse with other membranous organelles. Lamp-1 and lamp-2 (**l**ysosomal-**a**ssociated **m**embrane **p**roteins **-1** and **-2**) were identified as lysosomal membrane proteins that act as carriers for poly-N-glycans, primarily N-acetyllactosamines. They consist of two heavily glycosylated amino terminal domains, a single trans-membrane domain, and a short cytoplasmic tail. A tyrosine located at the fourth residue from the end of the cytoplasmic tail, a large hydrophobic amino acid as the last residue, and a glycine residue amino terminal to the tyrosine residue targets these proteins from the TGN to the lysosome. The role of the Lamp molecules may be a carrier for poly-N-acetyllactosamines and/or to protect lysosomal membranes from the soluble hydrolases.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Lamp-1 on HepG2 lysate. *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Lamp-1 antibody.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development
Immunofluorescence	Not Recommended

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Alto NM, Soderling J, Scott JD. Rab32 is an A-kinase anchoring protein and participates in mitochondrial dynamics. *J Biol Chem.* 2002; 158(4):659-668. (Clone-specific: Immunofluorescence)

Fukuda M. Lysosomal membrane glycoproteins. Structure, biosynthesis, and intracellular trafficking. *J Biol Chem.* 1991; 266(32):21327-21330.(Biology)

Fukuda M, Viitala J, Matteson J, Carlsson SR. Cloning of cDNAs encoding human lysosomal membrane glycoproteins, h-lamp-1 and h-lamp-2. Comparison of their deduced amino acid sequences. *J Biol Chem.* 1988; 263(35):18920-18928.(Biology)

Hocking DC, Kowalski K. A cryptic fragment from fibronectin's III1 module localizes to lipid rafts and stimulates cell growth and contractility. *J Cell Biol.* 2002; 158(1):175-184.(Clone-specific: Western blot)

Spoerl Z, Stumpf M, Noegel AA, Hasse A. Oligomerization, F-actin interaction, and membrane association of the ubiquitous mammalian coronin 3 are mediated by its carboxyl terminus. *J Biol Chem.* 2002; 277(50):48858-48867.(Clone-specific: Western blot)