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Rabbit Polyclonal LAMP2 antibody FITC

Catalog Number: LAMP2-FITC

Lot Number:

General Information

Product	LAMP2 Antibody FITC
Description	Lysosome-associated membrane glycoprotein 2 Antibody FITC-Conjugated
Accession #	Uniprot: P13473
Verified Applications	DB, ELISA, IHC, IP, WB
Species Cross Reactivity	Human, Mouse **Predicted:** Rat
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 260-310 on human lysosomal membrane glycoprotein-2.
Alternative Nomenclature	CD107 antigen-like family member B antibody, LAMP 2 antibody, LAMP 2C antibody, LAMPB antibody, LGP110 antibody, Lysosome associated membrane protein 2 antibody, MAC3 antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	FITC-Conjugated Immunoglobulins
Immunoglobulin & Concentration	.5 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20ºC for long term storage.

Recommended Dilutions

DOT Blot	1:4,000
ELISA	1:4,000
Immunohistochemistry	1:50-1:100
Immunoprecipitation	1:150
Western Blot	1:500

Related Products	Catalog #
Affinity Purified	LAMP2-201AP
BIOTIN-Conjugated	LAMP2-BIOTIN
Antigenic Blocking Peptide	P-LAMP2
Western Blot Positive Control	PC-LAMP2

Overview:

Lysosome-associated membrane proteins (LAMP) are glycosylated type I membrane proteins that play an important role in normal lysosomal function and in the biogenesis of the pigment melanin. Lysosomes are membrane-bound vacuoles which play a critical role in cellular metabolism by participating in endocytosis, the synthesis and assembly of acid hydrolases, acting as sites for digestion of foreign materials and for specialized autolytic cellular processes. LAMP2 is a member of the family of membrane glycoproteins and is a heavily glycosylated intrinsic protein with a molecular weight of ~49 kDa prior to posttranslational modification. LAMP2 has a structure comprised of a large amino-terminal intra-lysosomal domain, a hydrophobic trans-membrane domain, and a short carboxyl-terminal cytoplasmic tail. It is expressed in lysosomal/endosomal membranes in nearly all cells, and on the surface of activated platelets, activated lymphocytes and some tumor cell lines. LAMP2 (also designated CD107B) is involved in a variety of functions, including cellular adhesion and cellular homeostasis, including auto phagocytosis and antigen presentation and in the process of tumor invasion and metastasis. It also protects cells from the toxic effects of methylating mutagens. A lack or significant decrease in the prevalence of LAMP2 can lead to Danon's disease (DAND) also known as glycogen storage disease type 2B (GSD2B). This disease is characterized by by the clinical triad of cardiomyopathy, vacuolar myopathy and mental retardation. It is often associated with an accumulation of glycogen in muscle and lysosomes (2). LAMP2 immune reactions are related to focal necrotizing glomerulonephritis, a disease of the kidney. LAMP2 is highly expressed in placenta, lung and liver, less in kidney and pancreas, low in brain and skeletal muscle (3).

LAMP2-selective antibodies were generated against unique N-terminal peptide characteristic of the human LAMP2 protein. These antibodies have been fully characterized for cross reactivity with other cellular proteins. Western blot positive control samples in “ready-to-use” SDS-PAGE sample buffer and antigenic blocking peptide for LAMP2 are available. All antibodies can be conjugated to fluorophores and other secondary enzymes as an additional service. FabGennix provides custom antibody production services for researchers that are looking for high affinity monoclonal and polyclonal antibodies in various host animal species. For a complete listing of all FabGennix antibodies and services please visit www.Fabgennix.com.

References:

1. Konecki DS1, Foetisch K, Schlotter M, Lichter-Konecki U. Complete cDNA sequence of human lysosome-associated membrane protein-2. Biochem Biophys Res Commun. 1994 Nov 30
2. Arad M1, Maron BJ, Gorham JM, Johnson WH Jr, Saul JP, Perez-Atayde AR, Spirito P, Wright GB, Kanter RJ, Seidman CE, Seidman JG. Glycogen storage diseases presenting as hypertrophic cardiomyopathy. N Engl J Med. 2005 Jan 27
3. Konecki DS1, Foetisch K, Zimmer KP, et al. An alternatively spliced form of the human lysosome-associated membrane protein-2 gene is expressed in a tissue-specific manner. Biochem Biophys Res Commun. 1995 Oct 13

* For users who may require large amounts of the products listed above, please inquire about bulk material discounts.