

For Research Use Only

# Mouse CD107a / LAMP1 Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number: 86337-2-PBS



## Basic Information

<b>Catalog Number:</b> 86337-2-PBS	<b>GenBank Accession Number:</b> NM_010684.3	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 16783	<b>CloneNo.:</b> 250972C12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P11438	
<b>Isotype:</b> IgG	<b>Full Name:</b> lysosomal-associated membrane protein 1	
<b>Immunogen Catalog Number:</b> EG3858	<b>Calculated MW:</b> 44 kDa	
	<b>Observed MW:</b> 90-120 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, IF-P, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
mouse

## Product Information

86337-2-PBS targets CD107a / LAMP1 as part of a matched antibody pair:

MP02362-1: 86337-2-PBS capture and 86337-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

LAMP1 (CD107a) is a heavily glycosylated membrane protein enriched in the lysosomal membrane. LAMP1 is extensively glycosylated with asparagine-linked oligosaccharides which protect it from intracellular proteolysis (PMID: 10521503). Although LAMP1 is expressed largely in the endosome-lysosomal membrane of cells, it is also found on the plasma membrane (PMID: 16168398). Elevated LAMP1 expression at the cell surface has also been detected during platelet and granulocytic cell activation, as well as in some tumor cells (PMID: 29085473). LAMP1 functions to provide selectins with carbohydrate ligands. This protein has also been shown to be a marker of degranulation on lymphocytes such as CD8+ and NK cells and may also play a role in tumor cell differentiation and metastasis (PMID: 18835598; 29085473; 9426697).

## Storage

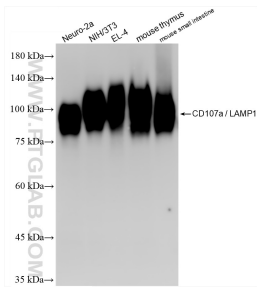
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

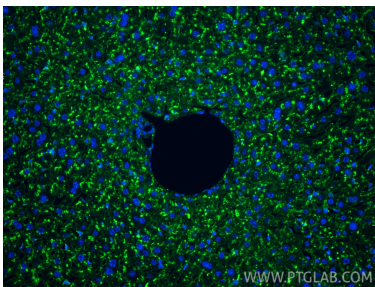
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

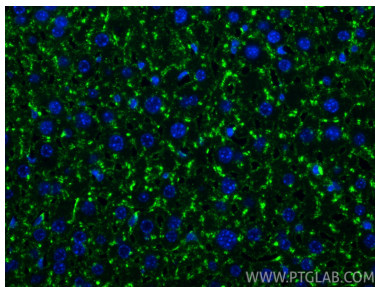
Selected Validation Data



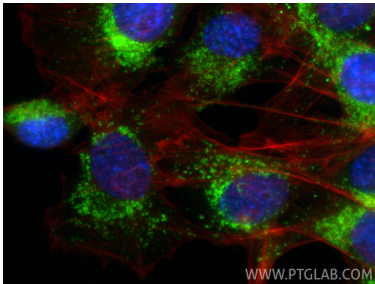
Various lysates were subjected to SDS PAGE followed by western blot with 86337-2-RR (LAMP-1/CD107a antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86337-2-PBS in a different storage buffer formulation.



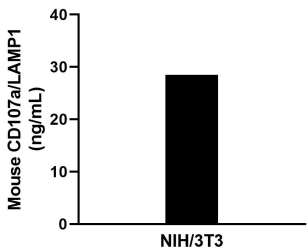
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using CD107a / LAMP1 antibody (86337-2-RR, Clone: 250972C12 ) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86337-2-PBS in a different storage buffer formulation.



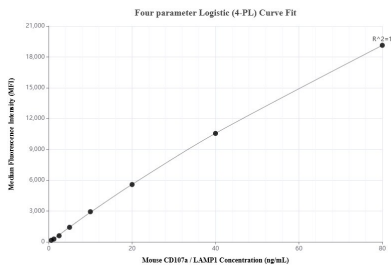
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using CD107a / LAMP1 antibody (86337-2-RR, Clone: 250972C12 ) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86337-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using CD107a / LAMP1 antibody (86337-2-RR, Clone: 250972C12 ) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 86337-2-PBS in a different storage buffer formulation.



The mean CD107a / LAMP1 concentration was determined to be 28.9 ng/mL in NIH/3T3 cell extract based on a 1.4 mg/mL extract load.



Cytometric bead array standard curve of MP02362-1, MOUSE CD107a / LAMP1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 86337-2-PBS. Detection antibody: 86337-1-PBS. Standard: Eg3858. Range: 0.625-80 ng/mL.