Product Datasheet

LAMP-2/CD107b Antibody NBP1-71692

Unit Size: 0.05 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NBP1-71692

LAMP-2/CD107b Antibody	
Product Information	
Unit Size	0.05 ml
Concentration	0.2 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Purity	Immunogen affinity purified
Buffer	PBS, 0.1% BSA, and 50% Glycerol
Product Description	
Host	Rabbit
Gene ID	3920
Gene Symbol	LAMP2
Species	Human, Mouse
Reactivity Notes	Human and mouse. Immunogen has 94% identity to bovine, 92% to porcine, and 84% to rat.
Marker	Late Endosome / Lysosome marker
Immunogen	A genomic peptide made to an internal region of the human LAMP2 protein (within residues 250-400). [Swiss-Prot P13473]
Notes	Manufactured by Genomic Antibody Technology™. GAT <u>FAQs</u>
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:1000, Simple Western 1:125, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:200, Immunohistochemistry-Paraffin 1:10-1:500
Application Notes	This LAMP2 antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry-paraffin embedded sections, and Western Blot. Immunoblot bands are seen ~40 kDa, 45 kDa and 110 kDa. The lower two bands represent the unglycosylated isoforms of LAMP2 while the 110 kDa band represents the glycosylated form. In ICC/IF, cytoplasmic lysosomal staining was observed in HeLa cells. In IHC-P, staining was observed in the cytoplasm of human kidney cells. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue.



Publications

Esteves AR, Cardoso SM Differential protein expression in diverse brain areas of Parkinson\'s and Alzheimer\'s disease patients Sci Rep 2020-08-04 [PMID: 32753661] (WB, Human)

Pera M, Larrea D, Guardia-Laguarta C et al. Increased localization of APP-C99 in mitochondria-associated ER membranes causes mitochondrial dysfunction in Alzheimer disease. EMBO J. 2017-10-10 [PMID: 29018038] (WB, Mouse)

Zhang X, Wu WK, Xu W et al. CXC Motif Chemokine 10 Impairs Autophagy and Autolysosome Formation in Non-alcoholic Steatohepatitis Theranostics. [PMID: 28824718] (WB, WB, Human)

Drivas TG, Holzbaur EL, Bennett J et al. Disruption of CEP290 microtubule/membrane-binding domains causes retinal degeneration. J Clin Invest. 2013-10-01 [PMID: 24051377] (ICC/IF, Human)



Procedures

Western Blot protocol for LAMP2 Antibody (NBP1-71692)

Western Blot Protocol

- 1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
- 2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
- 3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
- Rinse the blot.
- 5. Block the membrane using standard blocking buffer for at least 1 hour.
- 6. Wash the membrane in wash buffer three times for 10 minutes each.
- 7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
- 8. Wash the membrane in wash buffer three times for 10 minutes each.
- 9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
- 10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
- 11. Apply the detection reagent of choice in accordance with the manufacturers instructions.
- *Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunocytochemistry/Immunofluorescence Protocol for LAMP2 Antibody (NBP1-71692) Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

- 1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
- 2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
- 3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
- 4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
- 5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
- 6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
- 7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
- 8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
- 9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.
- *The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





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Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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