Product Datasheet

LAMP-1/CD107a Antibody (5H6) - BSA Free
NBP2-25154

Unit Size: 0.1 ml

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

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Publications: 6

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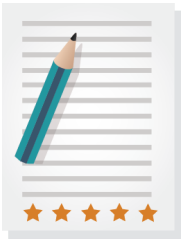
Updated 2/23/2025 v.20.1



NBP2-25154

LAMP-1/CD107a Antibody (5H6) - BSA Free

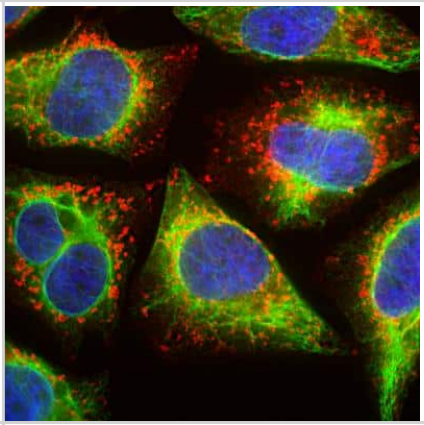
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	5H6
Preservative	0.035% Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	PBS, 50% glycerol
Target Molecular Weight	90-120 kDa

Product Description	
Host	Mouse
Gene ID	3916
Gene Symbol	LAMP1
Species	Human, Mouse
Reactivity Notes	Human Specific. Mouse reactivity reported in scientific literature (PMID: 29789598).
Marker	Late Endosome Marker
Immunogen	Amino acids 32-350 of the human LAMP1 precursor sequence. [UniProt# P11279]

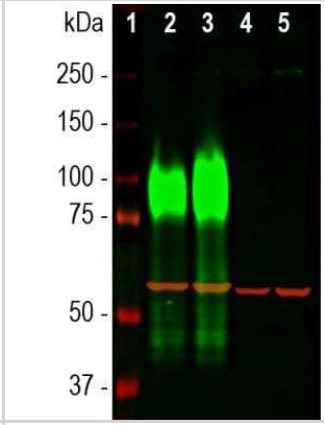
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:1000-1:10000, Immunohistochemistry 1:2000, Immunocytochemistry/ Immunofluorescence 1:2000
Application Notes	This LAMP1 (5H6) antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry, and Western Blot, where a band can be seen at ~90-120 kDa.

Images

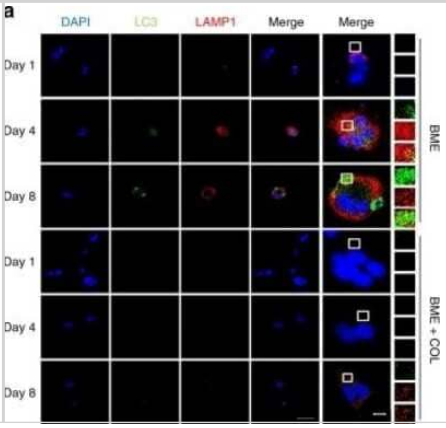
Immunocytochemistry/Immunofluorescence: LAMP-1/CD107a Antibody (5H6) [NBP2-25154] - Analysis of HeLa cells stained with mouse LAMP-1/CD107a mAb, dilution 1:500 (Red), and costained with chicken Vimentin pAb, dilution 1:10000, (Green). DAPI staining of nuclear DNA (Blue). The cells were treated with 50uM of chloroquine, an inhibitor of autophagy, for 16hrs prior to staining. The LAMP-1/CD107a antibody reveals vesicular staining of LAMP1 protein accumulated in swollen lysosomes, while the Vimentin antibody specifically labels the intermediate filament network in these cells.



Western Blot: LAMP-1/CD107a Antibody (5H6) [NBP2-25154] - Analysis of different cell lysates using mouse mAb to LAMP1, NBP2-25154 dilution 1:10,000 in green. Cells were maintained under normal conditions (Ct), or treated with 50uM of chloroquine (CQ), an inhibitor of autophagy, for 24 hours: [1] protein standard (red), [2] HeLa Ct, [3] HeLa +CQ, [4] NIH-3T3 Ct, and [5] NIH-3T3+CQ. The smeared band between 75-120kDa corresponds to variably glycosylated forms of the LAMP1 protein detected only in the human cells, this antibody fails to recognize the rodent homologue. The same blot was probed with chicken pAB to HSP60, dilution 1:20,000. The HSP60 antibody reveals heat shock 60 protein with apparent molecular weight of 60kDa in all preparations.



Immunocytochemistry/Immunofluorescence: LAMP-1/CD107a Antibody (5H6) [NBP2-25154] - D2.0 R cells activate autophagy upon entering a dormant state. Representative images are shown for immunofluorescent staining of lysosomal (LAMP-1/CD107a, red) and autophagic (LC3, green) markers of D2.0 R cells in BME (upper panels) and BME + COL1 (lower panels). Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41467-018-04070-6), licensed under a CC-BY license.



Publications

Niskanen J, Peltonen S, Ohtonen S et al. Uptake of alpha-synuclein preformed fibrils is suppressed by inflammation and induces an aberrant phenotype in human microglia. Glia 2024-10-22 [PMID: 39435593]

Lampinen, R, R Mitochondrial dysfunction in non-neuronal cells in Alzheimer's disease Thesis 2022-01-01

Jiang W, Liu F, Li H et al. TREM2 ameliorates anesthesia and surgery-induced cognitive impairment by regulating mitophagy and NLRP3 inflammasome in aged C57/BL6 mice Neurotoxicology [PMID: 35447280] (IHC-P, Mouse)

Sozen E, Demirel-Yalciner T, Sari D Et al. Deficiency of SREBP1c modulates autophagy mediated lipid droplet catabolism during oleic acid induced steatosis Metabolism open 2021-12-01 [PMID: 34704008] (ICC/IF, Mouse)

Keatinge M, Gegg ME, Watson L et al. Acid sphingomyelinase inhibition results in profound rescue of neuronal function in glucocerebrosidase deficiency unexpected opposing effects of Parkinson disease risk genes bioRxiv 2020-01-01 (Zebrafish)

Vera-Ramirez L, Vodnala SK, Nini R et al. Autophagy promotes the survival of dormant breast cancer cells and metastatic tumour recurrence Nat Commun 2018-05-22 [PMID: 29789598] (ICC/IF, Mouse)

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NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
NBP2-61619PEP	LAMP-1/CD107a Recombinant Protein Antigen

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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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