SANTA CRUZ BIOTECHNOLOGY, INC.

LIMP II (N-18): sc-25867

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Lysosomes are intracytoplasmic organelles that are found within leukocytes (granulocytes, neutrophils, basophils and eosinophils) and function as storage granules for small particles. Lysosomes actively support subcellular protein degradation mechanisms through fusion with cellular organelles such as phagocytic vacuoles and the plasma membrane. Lysosome fusion to the plasma membrane, known as exocytosis, releases the contents of the vesicle into the extracellular environment. The lysosomal integral membrane proteins I–III, known as LIMP-I, LIMP-II and LIMP-III, localize from the *trans*-Golgi network to lysosomes via an AP-3-dependent pathway that may involve AP-1 and Clathrin. LIMP I-III are protein markers for the lysosome organelle. These markers are exceptionally useful for microscopy studies, cellular fractionation validation and studies pertaining to protein trafficking through the secretory pathway.

CHROMOSOMAL LOCATION

Genetic locus: SCARB2 (human) mapping to 4q21.1; Scarb2 (mouse) mapping to 5 E2.

SOURCE

LIMP II (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LIMP II of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-25867 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LIMP II (N-18) is recommended for detection of LIMP II of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). LIMP II (N-18) is also recommended for detection of LIMP II in additional species, including equine, canine and porcine.

Suitable for use as control antibody for LIMP II siRNA (h): sc-41546, LIMP II siRNA (m): sc-41547, LIMP II shRNA Plasmid (h): sc-41546-SH, LIMP II shRNA Plasmid (m): sc-41547-SH, LIMP II shRNA (h) Lentiviral Particles: sc-41546-V and LIMP II shRNA (m) Lentiviral Particles: sc-41547-V.

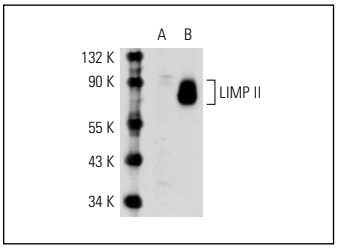
Molecular Weight of LIMP II: 72 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, A-431 whole cell lysate: sc-2201 or LIMP II (h): 293 Lysate: sc-111151.

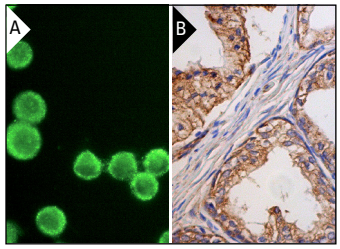
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LIMP II (N-18): sc-25867. Western blot analysis of LIMP II expression in non-transfected: sc-110760 (**A**) and human LIMP II transfected: sc-111151 (**B**) 293 whole cell lysates.



LIMP II (N-18): sc-25867. Immunofluorescence staining of methanol-fixed KNRK cells showing membrane localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Veith, N.M., et al. 2009. Immunolocalisation of PrPSc in scrapie-infected N2a mouse neuroblastoma cells by light and electron microscopy. Eur. J. Cell Biol. 88: 45-63.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.