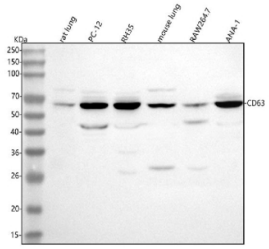
Cd63 Antibody (FY12396)

Catalog No.	Formulation	Size
FY12396	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P41731
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This Cd63 antibody is available for research use only.



Western blot analysis of Cd63 using anti-Cd63 antibody. Lane 1: rat lung tissue lysates, Lane 2: rat PC-12 whole cell lysates, Lane 3: rat RH35 whole cell lysates, Lane 4: mouse lung tissue lysates, Lane 5: mouse RAW264.7 whole cell lysates, Lane 6: mouse ANA-1 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Cd63 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. Cd63 (~26 kDa predicted) was detected at ~65 kDa in mouse and rat lysates, consistent with the heavily N-glycosylated and oligomeric forms described in peer-reviewed studies.

Description

The CD63 antibody targets CD63 antigen, a tetraspanin family member encoded by the CD63 gene that is widely expressed on cell membranes and intracellular vesicles. CD63 plays critical roles in vesicle trafficking, exosome

biogenesis, and cellular adhesion. As a component of late endosomes and lysosomes, it participates in membrane fusion events and exocytosis regulation. The CD63 antibody provides researchers with a reliable marker for exosomes, multivesicular bodies, and activated platelets.

CD63, also known as lysosomal-associated membrane protein 3, contains four transmembrane domains and two extracellular loops that mediate interactions with integrins and other tetraspanins. The CD63 antibody enables visualization of this protein on endosomal and plasma membranes, supporting studies of vesicle dynamics and signal transduction. In immune cells, CD63 is upregulated upon activation and translocated to the surface, where it modulates antigen presentation and cell adhesion processes.

In exosome biology, CD63 serves as a canonical marker used to identify and isolate extracellular vesicles derived from endosomal compartments. The CD63 antibody supports flow cytometry, immunoblotting, and immunoelectron microscopy applications to confirm exosome purity and origin. Its detection on vesicular membranes has made it an essential reagent in extracellular vesicle research. CD63 also interacts with proteins such as CD9 and CD81, forming tetraspanin-enriched microdomains that coordinate signaling receptor organization.

Clinically, altered CD63 expression has been associated with cancer progression, immune disorders, and allergic responses. Tumor-derived exosomes enriched in CD63 contribute to intercellular communication that promotes metastasis and immune evasion. The CD63 antibody allows quantitative and localization-based analysis of these vesicles in plasma or tissue samples. In platelets, CD63 acts as a marker of degranulation and activation, supporting research into coagulation and vascular inflammation.

The CD63 antibody performs strongly in western blotting, immunofluorescence, immunohistochemistry, and flow cytometry. It provides distinct membrane and vesicular staining in multiple cell types. NSJ Bioreagents supplies this antibody as a validated reagent with high specificity and reproducibility for cell biology, immunology, and cancer research. By enabling precise detection of CD63 antigen, the CD63 antibody remains a cornerstone tool for investigating exosome biology, endosomal trafficking, and cell communication pathways.

Application Notes

Optimal dilution of the Cd63 antibody should be determined by the researcher.

Immunogen

E.coli-derived mouse Cd63 recombinant protein (Position: A103-I203) was used as the immunogen for the Cd63 antibody.

Storage

After reconstitution, the Cd63 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.