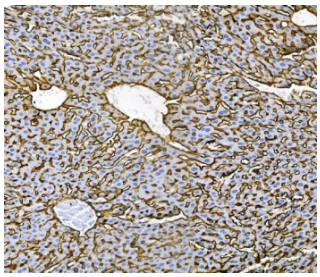
CD81 Antibody for Mouse and Rat (RQ4083)

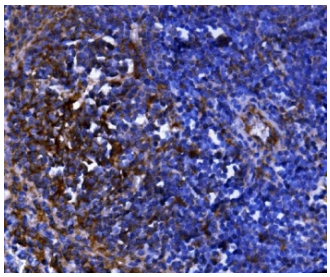
Catalog No.	Formulation	Size
RQ4083	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

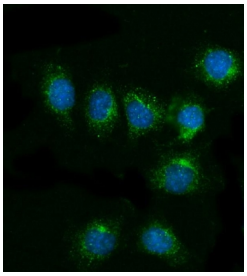
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P35762
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence (FFPE): 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This CD81 Antibody for Mouse and Rat is available for research use only.



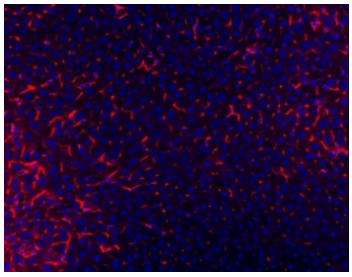
CD81 Antibody Mouse Spleen IHC. IHC staining of FFPE mouse spleen tissue using CD81 Antibody. Heat-induced epitope retrieval was performed by boiling tissue sections in EDTA buffer (pH 8.0) for 20 minutes, followed by cooling prior to staining. Strong CD81 staining is observed throughout the splenic tissue with a predominantly membrane-associated pattern. This CD81 Antibody for Mouse and Rat demonstrates detection of mouse CD81 and supports studies of TAPA-1 expression, immune cell biology and tetraspanin membrane organization in rodent models.



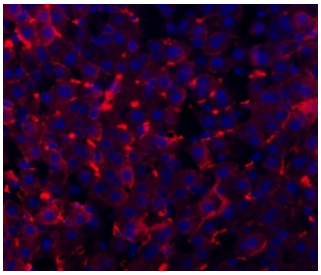
CD81 Antibody Mouse Liver IHC. IHC staining of FFPE mouse liver tissue using CD81 Antibody. Heat-induced epitope retrieval was performed by boiling tissue sections in EDTA buffer (pH 8.0) for 20 minutes, followed by cooling prior to staining. Positive CD81 staining is observed in the liver tissue. This CD81 Antibody for Mouse and Rat demonstrates detection of mouse CD81 and supports studies of TAPA-1 expression, tetraspanin biology and membrane organization in rodent models.



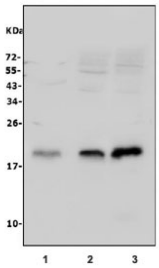
CD81 Antibody Mouse RM-1 Cell IF. Immunofluorescent staining of FFPE mouse RM-1 cells using CD81 Antibody (green) with DAPI nuclear counterstain (blue). Heat-induced epitope retrieval was performed by steaming in citrate buffer (pH 6.0) for 20 minutes. Positive CD81 staining is observed predominantly outside the nucleus with a punctate distribution. This CD81 Antibody for Mouse and Rat demonstrates detection of mouse CD81 and supports studies of TAPA-1 localization, tetraspanin biology and membrane organization in rodent cell models.



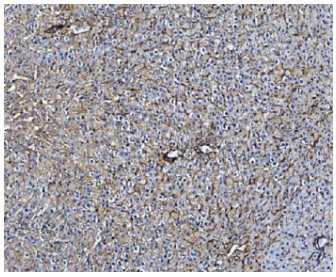
CD81 Antibody Mouse Liver Tissue IF. Immunofluorescent staining of FFPE mouse liver tissue using CD81 Antibody (red) with DAPI nuclear counterstain (blue). Heat-induced epitope retrieval was performed by steaming in EDTA buffer (pH 8.0) for 20 minutes. Positive CD81 staining is observed throughout the liver tissue with a predominantly membrane-associated distribution. This CD81 Antibody for Mouse and Rat demonstrates detection of mouse CD81 and supports studies of TAPA-1 localization, tetraspanin biology and membrane organization in rodent tissues.



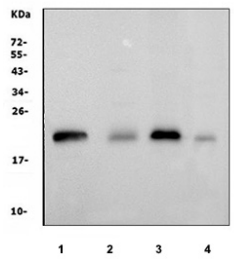
CD81 Antibody Rat Liver Tissue IF. Immunofluorescent staining of FFPE rat liver tissue using CD81 Antibody (red) with DAPI nuclear counterstain (blue). Heat-induced epitope retrieval was performed by steaming in EDTA buffer (pH 8.0) for 20 minutes. Positive CD81 staining is observed throughout the liver tissue with a predominantly membrane-associated distribution. This CD81 Antibody for Mouse and Rat demonstrates detection of rat CD81 and supports studies of TAPA-1 localization, tetraspanin biology and membrane organization in rodent tissues.



CD81 Antibody Mouse Thymus and Cell Lysate WB. Western blot analysis of mouse thymus tissue and SP2/0 and NIH 3T3 cell lysates using CD81 Antibody. Lane 1: mouse thymus; Lane 2: mouse SP2/0; Lane 3: mouse NIH 3T3. A specific band is detected at approximately 20-22 kDa, consistent with the predicted molecular weight range of 22-26 kDa for CD81. This CD81 Antibody for Mouse and Rat demonstrates detection of mouse CD81 by western blot and supports studies of TAPA-1 expression, tetraspanin biology and membrane-associated signaling in rodent models.



CD81 Antibody Rat Liver IHC. IHC staining of FFPE rat liver tissue using CD81 Antibody. Heat-induced epitope retrieval was performed by boiling tissue sections in EDTA buffer (pH 8.0) for 20 minutes, followed by cooling prior to staining. Positive CD81 staining is observed throughout the liver tissue with a predominantly membrane-associated pattern. This CD81 Antibody for Mouse and Rat demonstrates detection of rat CD81 and supports studies of TAPA-1 expression, tetraspanin biology and membrane organization in rodent models.



CD81 Antibody Mouse and Rat Brain WB. Western blot analysis of rat brain, mouse ovary, mouse brain and mouse NIH 3T3 cell lysates using CD81 Antibody. Lane 1: rat brain; Lane 2: mouse ovary; Lane 3: mouse brain; Lane 4: mouse NIH 3T3. A specific band is detected at approximately 22 kDa, consistent with the predicted molecular weight range of 22-26 kDa for CD81. This CD81 Antibody for Mouse and Rat demonstrates detection of CD81 across rodent tissues and cells and supports studies of TAPA-1 expression, tetraspanin biology and membrane-associated signaling.

Description

CD81 Antibody for Mouse and Rat recognizes CD81, a member of the tetraspanin family of integral membrane proteins. The immunogen used to generate this antibody was derived from mouse CD81, and experimental data demonstrate recognition of CD81 in mouse and rat samples. CD81, also known as TAPA-1 and Tetraspanin-28, contains four transmembrane domains and interacts with numerous cell-surface proteins. These interactions allow CD81 to participate in the organization of membrane complexes involved in signaling, adhesion and intercellular communication.

CD81 contributes to the formation of tetraspanin-enriched membrane domains containing receptors, integrins and other membrane-associated proteins. Within these molecular assemblies, CD81 can influence the localization, interactions and signaling properties of neighboring proteins. Rather than acting primarily as an enzyme or conventional receptor, TAPA-1 functions as a membrane organizer whose effects depend on its molecular partners and cellular context. A CD81 Antibody for Mouse and Rat can support studies examining this tetraspanin in rodent tissues and experimental model systems.

CD81 has particularly important functions in the immune system. It is expressed by multiple leukocyte populations and participates in molecular complexes involved in lymphocyte signaling and activation. In B cells, CD81 associates with CD19 and CD21 within the B-cell coreceptor complex and contributes to regulation of B-cell receptor signaling. CD81 has also been studied in T-cell biology and other aspects of immune cell development, activation and communication. These functions place CD81 among the CD molecules that provide important links between cell-surface organization and immune signaling.

CD81 is also widely studied in extracellular vesicle biology. Together with tetraspanins such as CD9 and CD63, CD81 is commonly associated with exosomes and related extracellular vesicles and is frequently examined in studies of vesicle characterization and intercellular communication. Additional research has connected CD81 with cell adhesion, migration, membrane trafficking and pathogen-host interactions. Mouse and rat experimental models therefore provide useful systems for investigating CD81 biology across immunology, neuroscience, cancer research and extracellular vesicle studies.

The mouse-derived immunogen and demonstrated recognition of mouse and rat samples make this antibody particularly relevant to researchers working with rodent experimental systems. Species reactivity should be based on experimentally validated samples rather than inferred solely from sequence similarity, so reactivity with additional species should not be assumed without supporting data. NSJ Bioreagents supplies antibodies to CD81 and other CD proteins involved in membrane organization and cellular signaling. A CD81 Antibody for Mouse and Rat can support research on TAPA-1 expression, tetraspanin biology, immune signaling and extracellular vesicle biology in rodent models.

For additional information on CD81/TAPA-1 and its roles in tetraspanin membrane organization, immune signaling and cellular communication, see our recombinant CD81 Antibody page.

Application Notes

Optimal dilution of the CD81 Antibody for Mouse and Rat should be determined by the researcher.

Immunogen

A recombinant mouse partial protein corresponding to amino acids K116-K201 was used as the immunogen for the CD81 antibody.

Storage

After reconstitution, the CD81 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

CD81 antibody, Mouse CD81 antibody, Rat CD81 antibody, TAPA-1 antibody, TAPA1 antibody, Tetraspanin-28 antibody, TSPAN28 antibody, Target of Antiproliferative Antibody 1 antibody

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