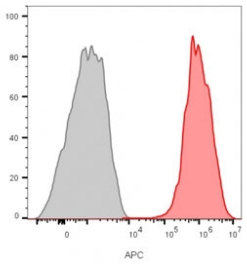
CD81 Antibody / TAPA-1 Antibody [clone rC81/3442] (V8525)

Catalog No.	Formulation	Size
V8525-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8525-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8525SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

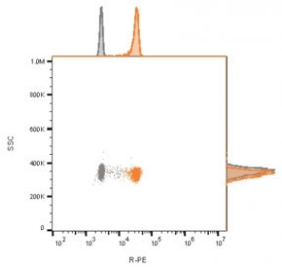
Recombinant MOUSE MONOCLONAL

Bulk quote request

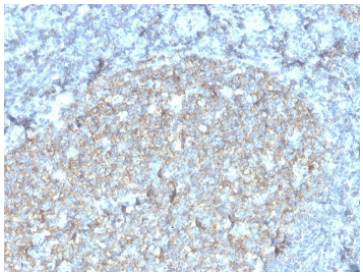
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rC81/3442
Purity	Protein G affinity chromatography
UniProt	P60033
Localization	Cytoplasmic, membranous
Applications	Flow Cytometry : 1-2ug/million cells Western Blot : 2-4ug/ml for 2 hours at RT Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This CD81 Antibody / TAPA-1 Antibody is available for research use only.



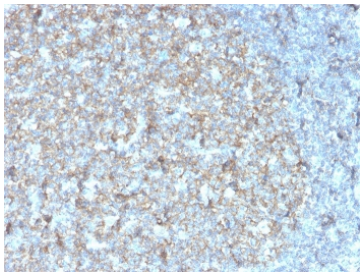
CD81 Antibody MCF7 Cell FACS. Flow cytometry analysis of human MCF7 cells using recombinant CD81 Antibody. The histogram shows antibody-stained cells (red) compared with unstained cells (gray), with a strong positive fluorescence shift demonstrating detection of cell-surface CD81. This CD81 Antibody, also called a TAPA-1 Antibody, clone rC81/3442, demonstrates CD81 expression on human MCF7 cells and supports studies of tetraspanin membrane organization, cell-surface signaling and cellular communication.



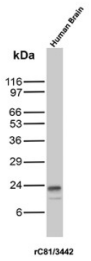
CD81 Antibody MCF-7 Exosome FACS. Flow cytometry analysis of bead-bound exosomes derived from human MCF-7 cells using recombinant CD81 Antibody, clone rC81/3442. The plot shows CD81-stained exosome-bound beads (orange) compared with unstained controls (gray), with a clear positive fluorescence shift demonstrating detection of exosomal CD81. This CD81 Antibody, also called a TAPA-1 Antibody, demonstrates recognition of CD81 on MCF-7-derived exosomes and supports studies of tetraspanin biology, extracellular vesicles and cellular communication.



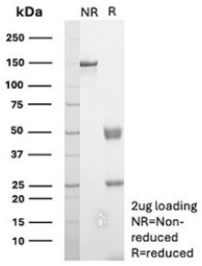
CD81 Antibody Human Tonsil IHC. IHC staining of FFPE human tonsil tissue using recombinant CD81 Antibody, clone rC81/3442. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA (pH 9.0) for 20 minutes, followed by cooling prior to staining. Positive CD81 staining is observed in lymphoid cells within the tonsil. This CD81 Antibody, also called a TAPA-1 Antibody, demonstrates CD81 expression in human lymphoid tissue and supports studies of immune cell signaling, tetraspanin membrane organization and cellular interactions.



CD81 Antibody Human Tonsil Lymphoid Tissue IHC. IHC staining of FFPE human tonsil tissue using recombinant CD81 Antibody, clone rC81/3442. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA (pH 9.0) for 20 minutes, followed by cooling prior to staining. Strong CD81 staining is observed throughout the lymphoid cell population. This CD81 Antibody, also called a TAPA-1 Antibody, demonstrates CD81 expression in human tonsil and supports studies of immune cell signaling, tetraspanin membrane organization and cellular interactions.



CD81 Antibody Human Brain WB. Western blot analysis of human brain tissue lysate using CD81 Antibody, clone rC81/3442. A prominent band is detected at approximately 22â€“24 kDa, consistent with the expected molecular weight of CD81. This CD81 Antibody, also called a TAPA-1 Antibody, demonstrates detection of CD81 in human brain tissue and supports studies of tetraspanin membrane organization, cell signaling and cellular communication.



CD81 Antibody Recombinant mAb Purity SDS-PAGE. SDS-PAGE analysis of purified CD81 Antibody, clone rC81/3442, under non-reducing (NR) and reducing (R) conditions with 2 ug of antibody loaded per lane. The non-reduced antibody migrates predominantly at approximately 150 kDa, while reduction produces bands corresponding to the immunoglobulin heavy and light chains at approximately 50 and 25 kDa, respectively. The results confirm the purity and structural integrity of this recombinant CD81 Antibody, also called a TAPA-1 Antibody.

Description

CD81 Antibody / TAPA-1 Antibody recognizes CD81, a widely expressed cell-surface glycoprotein belonging to the tetraspanin family of membrane proteins. CD81, historically known as TAPA-1, contains four transmembrane domains and extracellular regions that facilitate interactions with other membrane-associated proteins. Like other tetraspanins, CD81 helps organize specialized membrane complexes that bring together receptors, adhesion molecules and signaling proteins. Through these interactions, CD81 contributes to membrane organization, cell adhesion, migration and signal transduction in numerous cell types, with particularly important functions in immune cell biology.

CD81 participates in the formation of tetraspanin-enriched membrane microdomains, where it associates with other

tetraspanins, integrins and signaling proteins. These molecular assemblies can influence the localization and activity of membrane receptors and provide a platform for coordinating cellular responses. Rather than functioning primarily as an independent receptor with intrinsic enzymatic activity, TAPA-1 acts as a membrane organizer whose biological effects depend extensively on its interacting partners and cellular context. This characteristic has made CD81 an important target for studying membrane architecture and the organization of cell-surface signaling complexes.

In the immune system, CD81 is expressed on B cells, T cells and other leukocyte populations and participates in mechanisms regulating activation and cellular interactions. On B cells, CD81 associates with CD19 and CD21 as part of the B-cell coreceptor complex, helping regulate signaling initiated through the B-cell receptor. CD81 also contributes to processes involving immune cell adhesion, migration and communication. These functions connect TAPA-1 biology with broader studies of CD molecules that define immune cell populations and regulate interactions at the cell surface.

CD81 has additional roles in cell development, fusion, migration and pathogen-host interactions. It is well known as a host factor involved in hepatitis C virus entry, where interactions involving the extracellular region of CD81 contribute to viral attachment and entry mechanisms. CD81 is also abundant on extracellular vesicles and is frequently used together with other tetraspanins such as CD9 and CD63 in studies of exosomes and related extracellular vesicle populations. Its broad expression and participation in membrane protein complexes have further generated interest in CD81 in cancer biology, where changes in tetraspanin-associated networks may influence cell adhesion, migration and intercellular communication.

The combination of broad cell-surface expression and extensive interactions with other membrane proteins places CD81 at the intersection of membrane organization, immune signaling and cellular communication. Its established designation as a CD molecule also makes CD81 particularly relevant to studies comparing cell-surface proteins involved in immune cell identification and function. NSJ Bioreagents supplies antibodies to CD81 and other CD molecules used in cell biology and immunology research. Clone rC81/3442 is a recombinant mouse monoclonal antibody directed against CD81/TAPA-1 and provides a defined reagent for research applications in which this clone has been validated.

For antibodies to additional cell-surface molecules used in immune cell identification, signaling and functional studies, explore our CD Antibodies page.

Application Notes

Optimal dilution of the CD81 Antibody / TAPA-1 Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human CD81 protein was used as the immunogen for the recombinant CD81 antibody.

Storage

Store the recombinant CD811 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

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

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