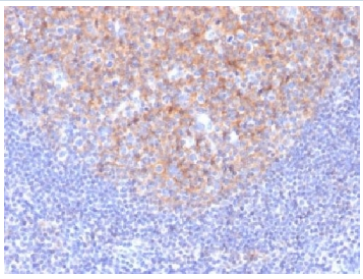
CD81 Antibody [clone 1.3.3.22] (V3485)

Catalog No.	Formulation	Size
V3485-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3485-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3485SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

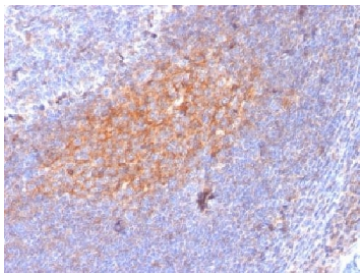
Citations (24)

Bulk quote request

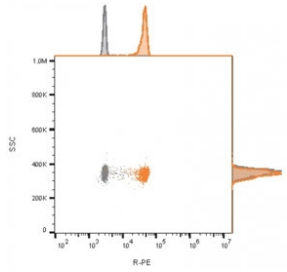
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1.3.3.22
Purity	Protein G affinity chromatography
UniProt	P60033
Localization	Cytoplasmic, membranous
Applications	Functional Studies : order BSA/sodium azide-free format Flow Cytometry : 0.5-1ug/million cells Immunofluorescence : 0.5-1ug/ml Western Blot : 0.5-1ug/ml for 2 hours at RT Immunohistochemistry (FFPE) : 2-4ug/ml for 30 min at RT
Limitations	This CD81 antibody is available for research use only.



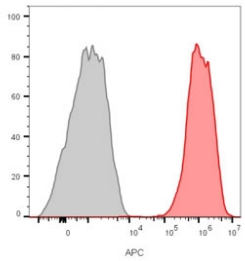
IHC testing of FFPE human tonsil with CD81 antibody (clone 1.3.3.22). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human lymph node with CD81 antibody (clone 1.3.3.22). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



Flow cytometry analysis of bead-bound exosomes derived from MCF-7 cells using CD81 antibody (clone 1.3.3.22). Gray=unstained cells, Orange = CD81 antibody.



Flow cytometry staining of human MCF7 cells with CD81 antibody; Gray=unstained cells, Orange= CD81 antibody.

Description

CD81 antibody is a widely used reagent for investigating CD81, a tetraspanin protein that regulates cell adhesion, migration, and signaling. CD81 is expressed on many cell types, including lymphocytes, hepatocytes, and epithelial cells. It is involved in organizing membrane microdomains where signaling molecules and receptors assemble, influencing diverse cellular processes. Its role in immunity, infection, and cancer has made CD81 a focus of biomedical research.

CD81 belongs to the tetraspanin family, characterized by four transmembrane domains and two extracellular loops. It interacts with other tetraspanins and with proteins such as integrins, modulating signaling pathways that affect immune function and cell motility. In the immune system, CD81 contributes to B cell activation and T cell signaling. In hepatology, CD81 is known as a receptor for hepatitis C virus entry, highlighting its role in infectious disease research.

The CD81 antibody clone 1.3.3.22 provides consistent and specific detection of this tetraspanin. Clone 1.3.3.22 has been used to study B cell receptor signaling, T cell costimulation, and the contribution of tetraspanins to viral infection. It has also supported oncology studies, where CD81 expression is linked to tumor progression and metastasis. The reproducibility of this clone ensures accurate labeling across applications.

Research on CD81 has broadened understanding of how tetraspanins influence cell communication and disease. Its role as a hepatitis C virus receptor has made it critical for developing models of viral entry and potential therapeutic strategies. In cancer biology, altered CD81 expression contributes to changes in adhesion and invasiveness. Clone 1.3.3.22 continues to be a standard reagent for studies spanning immunology, virology, and oncology.

NSJ Bioreagents supplies this CD81 antibody to support diverse areas of research. Alternate terms such as target of antiproliferative antibody 1 antibody, TAPA1 antibody, tetraspanin 28 antibody, and cluster of differentiation 81 antibody are also used in the literature, reflecting the varied nomenclature associated with this protein.

Application Notes

Optimal dilution of the CD81 antibody should be determined by the researcher.

Immunogen

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

Storage

Store the CD81 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).