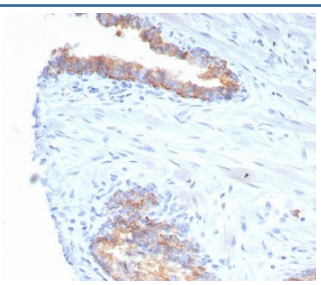
CD38 Antibody / Immune Cell Differentiation Marker Antibody [clone rCD38/6982] (V5036)

Catalog No.	Formulation	Size
V5036-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5036-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5036SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

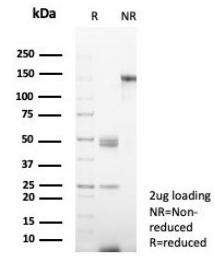
Recombinant | MOUSE MONOCLONAL

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	rCD38/6982
Purity	Protein A/G affinity
UniProt	P28907
Localization	Cell surface, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD38 Antibody / Immune Cell Differentiation Marker Antibody is available for research use only.



CD38 Antibody human prostate carcinoma tissue IHC. Immunohistochemistry analysis of CD38 expression in FFPE human prostate carcinoma tissue using CD38 antibody clone rCD38/6982 at 2 ug/ml. Strong membranous and cytoplasmic HRP-DAB brown staining highlights infiltrating lymphocyte populations within stromal and peri-glandular regions, consistent with a differentiation-associated expression pattern across immune cell subsets. The staining demonstrates variable intensity among immune cells, reflecting heterogeneity in maturation and activation state within the tumor microenvironment, while epithelial tumor cells show limited staining. HIER was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



SDS-PAGE analysis of purified, BSA-free CD38 antibody (clone rCD38/6982) as confirmation of integrity and purity.

Description

CD38 (CD38) is a type II transmembrane glycoprotein and ectoenzyme that plays a central role in immune cell differentiation and maturation. It is expressed at varying levels across different stages of lymphocyte development, with particularly high expression on plasma cells and activated immune populations. This dynamic expression pattern makes CD38 a valuable marker for tracking immune cell differentiation and lineage progression.

CD38 Antibody / Immune Cell Differentiation Marker Antibody is uniquely positioned for studies examining the transition of immune cells through different developmental and activation states. CD38 antibody, also known as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely used to characterize differentiation pathways in lymphocytes and to identify stages of immune cell maturation.

During B cell differentiation, CD38 expression increases as cells transition toward plasma cell lineage, where it reaches high levels associated with antibody secretion. This progressive change in expression allows CD38 to serve as a marker for identifying differentiation stages and distinguishing mature plasma cells from earlier developmental forms.

Similarly, in T cells and other immune populations, CD38 expression reflects activation and differentiation status, supporting its use as a marker for functional maturation. This makes CD38 particularly useful in studies examining how immune cells respond to stimulation and progress through activation-dependent pathways.

CD38 expression therefore provides a dynamic readout of immune cell state, capturing both lineage identity and progression through differentiation pathways. Detection of CD38 enables researchers to map immune cell development and to identify shifts in population composition under different biological conditions.

In addition to its role as a marker, CD38 contributes functionally to differentiation processes through its involvement in signaling and metabolic pathways. Its enzymatic activity influences intracellular signaling events that regulate cell fate decisions, linking expression to underlying biological mechanisms.

CD38 is widely used in research focused on immune system development, adaptive immune responses, and cellular maturation, where understanding differentiation pathways is essential for interpreting immune function.

CD38 Antibody rCD38/6982 for immune cell differentiation studies therefore provides a powerful tool for analyzing maturation and lineage progression, enabling detailed investigation of immune cell development and functional specialization.

This antibody is part of our CD38 antibody collection, which includes application-specific formats for immunohistochemistry, flow cytometry, western blot, and immunofluorescence research.

Application Notes

Optimal dilution of the CD38 Antibody / Immune Cell Differentiation Marker Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-300) from the human protein was used as the immunogen for the CD38 antibody.

Storage

Aliquot the CD38 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD38 differentiation marker antibody, CD38 lymphocyte differentiation antibody, CD38 plasma cell differentiation marker, CD38 immune maturation marker

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