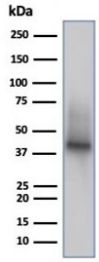
CD38 Antibody / Tumor Immune Microenvironment Marker Antibody [clone rCD38/6447] (V9296)

Catalog No.	Formulation	Size
V9296-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9296-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9296SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

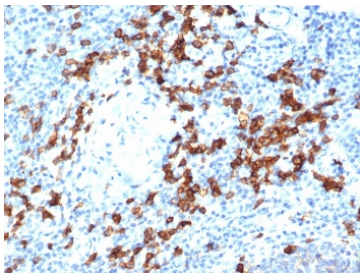
Recombinant | MOUSE MONOCLONAL

Bulk quote request

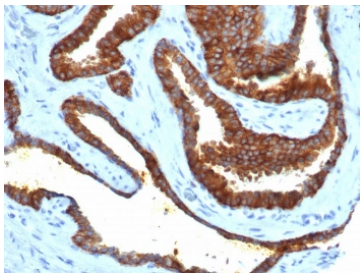
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rCD38/6447
Purity	Protein A/G affinity
UniProt	P28907
Localization	Cell Surface, Cytoplasm
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This CD38 Antibody / Tumor Immune Microenvironment Marker Antibody is available for research use only.



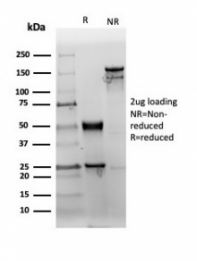
CD38 Antibody human Raji lysate WB. Western blot analysis of CD38 expression in human Raji cell lysate using CD38 antibody clone rCD38/6447. Lane 1: human Raji cell lysate. A band is detected at approximately 40â€“45 kDa, consistent with the predicted molecular weight of CD38, with higher apparent molecular weight reflecting glycosylation of this cell surface protein and aligning with expression in B cell-derived lines. The detection profile supports its use in studies of immune cell presence within the tumor microenvironment.



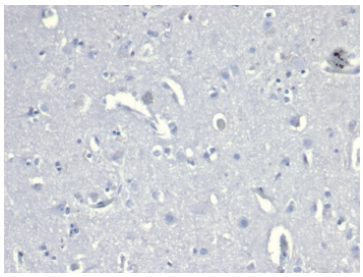
CD38 Antibody human tonsil tissue IHC. Immunohistochemistry analysis of CD38 expression in FFPE human tonsil tissue using CD38 antibody clone rCD38/6447 at 2 ug/ml. Strong membranous and cytoplasmic HRP-DAB brown staining highlights numerous plasma cells and activated lymphocytes within interfollicular regions and surrounding germinal centers, demonstrating dense immune cell distribution. The staining pattern is consistent with detection of immune cell populations within lymphoid tissue architecture, with clear contrast against predominantly negative background lymphocytes. 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.



CD38 Antibody human prostate adenocarcinoma tissue IHC. Immunohistochemistry analysis of CD38 expression in FFPE human prostate adenocarcinoma tissue using CD38 antibody clone rCD38/6447 at 2 ug/ml. Strong membranous and cytoplasmic HRP-DAB brown staining highlights immune cell populations within stromal and peri-glandular regions, consistent with detection of tumor-infiltrating lymphocytes and plasma cells within the tumor microenvironment. The staining pattern demonstrates immune cell distribution in malignant tissue, while epithelial tumor cells show variable 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 (rCD38/6447) as confirmation of integrity and purity.



Negative control: IHC staining of FFPE human brain tissue using CD38 antibody (clone rCD38/6447) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

CD38 (CD38) is a multifunctional type II transmembrane glycoprotein and ectoenzyme involved in NAD metabolism and calcium signaling, with broad expression across plasma cells, activated lymphocytes, and additional immune cell populations. Within tissues, CD38 expression frequently reflects the presence and activity of immune cells, making it a valuable marker for studying immune infiltration and cellular composition in disease settings, particularly within the tumor microenvironment.

CD38 Antibody / Tumor Immune Microenvironment Marker Antibody is uniquely positioned for detection of immune cell populations within tumor tissues, enabling detailed analysis of plasma cells and activated lymphocytes that contribute to tumor-associated immune responses. CD38 antibody, also known as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely used to evaluate immune infiltration and characterize the immune landscape of solid tumors.

In tumor tissues, CD38 expression is typically localized to infiltrating immune cells rather than tumor cells themselves, producing distinct membranous and cytoplasmic staining patterns within stromal and peritumoral regions. CD38-positive cells may be distributed diffusely or form focal clusters, reflecting variations in immune infiltration and activity across

different tumor types and microenvironmental conditions. This pattern allows clear distinction between immune and non-immune compartments within tumor sections.

The presence and distribution of CD38-positive cells provide insight into the composition of the tumor microenvironment, including the abundance and localization of plasma cells and activated lymphocytes. These immune populations contribute to tumor-associated inflammation and immune responses, making their detection important for understanding tumor biology and host interactions.

CD38 is frequently studied in cancer research due to its association with immune cell infiltration and its functional role in regulating immune cell signaling. Through its enzymatic activity in NAD metabolism and calcium signaling, CD38 influences immune cell behavior and interactions within the tumor microenvironment, linking its expression to broader biological processes involved in tumor progression and immune regulation.

Detection of CD38-positive immune cells supports analysis of tumor-associated immune responses and provides a means to evaluate immune cell distribution within malignant tissues. This is particularly valuable in studies examining the relationship between tumor cells and the immune system, as well as in investigations of immune-mediated mechanisms in cancer.

The ability to visualize CD38 expression within tumor tissues enables detailed characterization of immune infiltration patterns and supports comparative analysis across tumor types and experimental conditions. This contributes to a more comprehensive understanding of the tumor microenvironment and its role in disease biology.

CD38 Antibody rCD38/6447 for tumor immune microenvironment analysis therefore provides a powerful tool for studying immune cell presence, distribution, and functional context within tumors, supporting research into cancer biology and immune system interactions.

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 / Tumor Immune Microenvironment Marker Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 200-300 of human CD38 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 tumor immune marker antibody, CD38 immune infiltration antibody, CD38 tumor microenvironment antibody, CD38 lymphocyte infiltration marker antibody

Copyright © NSJ Bioreagents. All rights reserved.