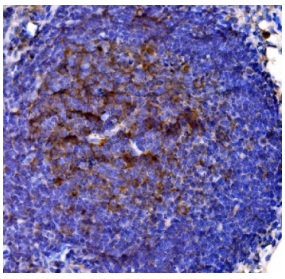
CD38 Antibody / Mouse and Rat Reactive CD38 Antibody (RQ7966)

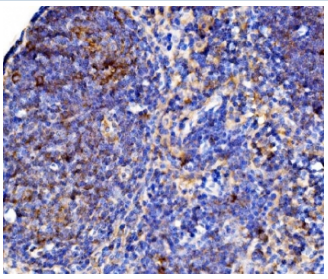
Catalog No.	Formulation	Size
RQ7966	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	P56528
Applications	Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This CD38 Antibody / Mouse and Rat Reactive CD38 Antibody is available for research use only.



CD38 Antibody rat lymph node tissue IHC. Immunohistochemistry analysis of Cd38 / plasma cell marker expression in FFPE rat lymph node tissue using a CD38 antibody. Strong membranous and cytoplasmic HRP-DAB brown staining highlights lymphocyte populations within cortical and paracortical regions, with dense signal in immune cell-rich compartments. The staining pattern demonstrates conserved Cd38 expression in rodent lymphoid tissue with clear contrast against surrounding negative stromal elements. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



CD38 Antibody mouse lymph node tissue IHC. Immunohistochemistry analysis of Cd38 / plasma cell marker expression in FFPE mouse lymph node tissue using a CD38 antibody. Strong membranous and cytoplasmic HRP-DAB brown staining highlights lymphocyte populations within cortical and paracortical regions, with prominent signal in immune cell-rich compartments and scattered intensely positive cells consistent with activated lymphocytes. The staining pattern demonstrates conserved Cd38 expression across mouse lymphoid tissue with clear contrast against surrounding negative stromal elements. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.

Description

CD38 (CD38) is a type II transmembrane glycoprotein and ectoenzyme of the ADP-ribosyl cyclase family that regulates NAD metabolism and calcium signaling, playing a central role in immune activation, lymphocyte differentiation, and intercellular signaling. It is widely expressed on plasma cells, activated T and B lymphocytes, natural killer cells, and additional immune cell populations, where it contributes to regulation of immune responses and cellular communication within lymphoid tissues.

CD38 Antibody / Mouse and Rat Reactive CD38 Antibody is developed for robust cross-species detection of CD38, enabling consistent identification of CD38-positive immune cell populations in both mouse and rat models. CD38 antibody, also known as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is commonly used in immunology, oncology, and inflammatory disease research where rodent systems are essential for modeling immune function and therapeutic response. Reliable cross-species reactivity is critical in these settings to ensure continuity between experimental models and human biology.

As a rabbit polyclonal antibody, this CD38 antibody recognizes multiple epitopes on the target protein, enhancing its ability to detect CD38 across species with minor sequence variation. This multi-epitope recognition supports strong and consistent signal in both mouse and rat tissues, particularly in cases where monoclonal antibodies may exhibit reduced binding due to epitope divergence. The polyclonal format therefore provides an advantage for cross-species applications by increasing detection sensitivity and robustness in heterogeneous biological samples.

In mouse and rat lymphoid tissues, CD38 expression is prominently observed on lymphocyte populations within cortical and paracortical regions, as well as in plasma cell-rich compartments. Immunohistochemical staining demonstrates strong membranous and cytoplasmic labeling of immune cells, allowing clear visualization of lymphoid architecture and immune cell distribution. The consistent detection of CD38 across both species supports its use in comparative studies of immune organization and activation.

Cross-species detection of CD38 is particularly valuable in preclinical research, where mouse and rat models are widely used to investigate immune responses, tumor progression, and therapeutic efficacy. The ability to apply a single antibody across multiple species simplifies experimental design and reduces variability, enabling more direct comparison of results between model systems and improving translational relevance.

CD38 expression in rodent models reflects its conserved biological role in immune regulation, including involvement in lymphocyte activation, plasma cell differentiation, and signaling pathways linked to calcium mobilization and metabolic regulation. Detection of CD38 in these systems therefore provides insight into both cellular identity and functional state, supporting studies of immune dynamics in health and disease.

The use of a rabbit polyclonal CD38 antibody further supports detection in complex or variable samples, where antigen accessibility or expression levels may differ between tissues or experimental conditions. Broad epitope recognition increases the likelihood of consistent binding, contributing to reliable identification of CD38-positive populations in diverse research settings.

CD38 Antibody with mouse and rat reactivity is therefore a powerful tool for cross-species immune research, combining the advantages of polyclonal epitope recognition with conserved CD38 biology to enable consistent detection of immune cell populations in rodent models and support translation of findings to human systems.

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 / Mouse and Rat Reactive CD38 Antibody should be determined by the researcher.

Immunogen

Amio acids CVDNYRPARFLQCVK were used as the immunogen for the CD38 antibody.

Storage

After reconstitution, the CD38 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

CD38 mouse reactive antibody, CD38 rat reactive antibody, CD38 cross species antibody, CD38 plasma cell marker antibody, CD38 lymphocyte marker antibody

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