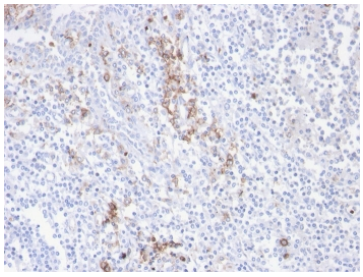
CD38 Antibody / Plasma Cell Marker Antibody [clone CD38/4247R] (V8742)

Catalog No.	Formulation	Size
V8742-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8742-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8742SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

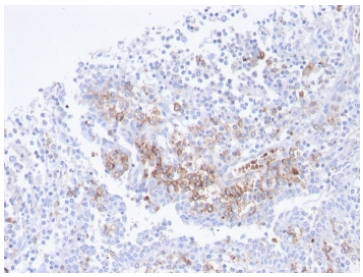
Recombinant RABBIT MONOCLONAL

Bulk quote request

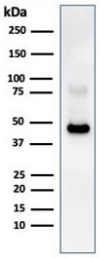
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CD38/4247R
Purity	Protein A affinity chromatography
UniProt	P28907
Localization	Cell surface, cytoplasm and nucleus
Applications	Western blot: 2-4ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This CD38 Antibody / Plasma Cell Marker Antibody is available for research use only.



CD38 Antibody human tonsil tissue IHC. Immunohistochemistry analysis of CD38 / plasma cell marker expression in FFPE human tonsil using CD38 Antibody / Plasma Cell Marker Antibody. Strong membranous and cytoplasmic HRP-DAB brown staining highlights plasma cells within interfollicular regions, with scattered positive cells extending around germinal centers, consistent with antibody-secreting cell distribution. The staining pattern demonstrates clear identification of plasma cell populations with minimal background in surrounding 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.



IHC staining of FFPE human tonsil with recombinant CD38 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CD38 Antibody human Raji lysate WB. Western blot analysis of CD38 / plasma cell marker expression in human Raji cell lysate using CD38 Antibody / Plasma Cell Marker Antibody. 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.

Description

CD38 (CD38) is a type II transmembrane glycoprotein and ectoenzyme of the ADP-ribosyl cyclase family that regulates NAD metabolism, cyclic ADP-ribose production, and calcium-dependent signaling pathways. It is most prominently expressed on plasma cells, where it serves as one of the most reliable and widely used markers for identifying antibody-secreting cells within lymphoid tissues and inflammatory environments. In addition to plasma cells, CD38 is expressed on activated T and B lymphocytes, natural killer cells, and subsets of myeloid cells, supporting its broader role in immune activation and differentiation.

CD38 Antibody / Plasma Cell Marker Antibody is uniquely positioned for detection of plasma cells, enabling clear and consistent identification of these cells within complex tissue and cellular environments. CD38 antibody, also known as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely used in studies of plasma cell biology, humoral immune responses, and antibody production. The high-density expression of CD38 on plasma cells produces strong membranous and cytoplasmic signal, allowing these cells to be readily distinguished from surrounding lymphocyte populations that typically exhibit lower or more variable expression.

In lymphoid tissues such as tonsil, spleen, lymph node, and bone marrow, plasma cells are characterized by intense CD38 expression that outlines their morphology and distribution. This strong signal enables precise identification of plasma cell-rich regions and supports analysis of immune cell composition within normal and reactive tissues. The contrast between CD38-high plasma cells and CD38-low lymphocytes is particularly valuable for distinguishing antibody-secreting cells from other immune populations in heterogeneous samples.

CD38 is extensively used in studies of plasma cell-associated diseases, where expansion or redistribution of plasma cells is a defining feature. Detection of CD38-positive populations supports evaluation of plasma cell abundance, spatial distribution, and relationship to surrounding tissue architecture. This makes CD38 a central marker in research focused on plasma cell biology and immune-mediated disease processes.

Beyond its role as a phenotypic marker, CD38 contributes directly to plasma cell function through its enzymatic activity in NAD metabolism and calcium signaling. These pathways are linked to cellular activation, metabolic regulation, and intercellular communication, providing a functional context for CD38 expression. Detection of CD38 therefore offers insight not only into cellular identity but also into the activation and metabolic state of plasma cells.

CD38 expression is also observed at lower levels on activated lymphocytes, but its markedly elevated expression on plasma cells makes it particularly effective for identifying these cells in both tissue-based and suspension-based systems. This differential expression pattern supports its use as a defining marker of plasma cell differentiation and antibody-

secreting function.

CD38 Antibody for plasma cell detection is therefore a foundational tool for identifying antibody-secreting cells, enabling detailed analysis of plasma cell distribution, immune responses, and disease-associated changes in immune cell composition across a wide range of biological contexts.

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 / Plasma Cell Marker Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 200-300 from the human protein was used as the immunogen for the recombinant CD38 antibody.

Storage

Store the recombinant CD38 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD38 plasma cell marker antibody, CD38 immunoglobulin secreting cell marker antibody, CD38 ADPRC1 antibody, CD38 lymphocyte marker antibody

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