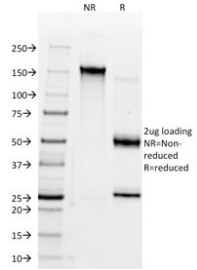
CD38 Antibody Clone AT1 / Plasma Cell Marker Antibody [clone AT1] (V3007)

Catalog No.	Formulation	Size
V3007-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3007-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3007SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (13)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	AT1
Purity	Protein G affinity chromatography
UniProt	P28907
Localization	Cell surface, cytoplasm and nucleus
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This CD38 Antibody Clone AT1 is available for research use only.



CD38 Antibody Clone AT1 SDS-PAGE. SDS-PAGE analysis of purified, BSA-free CD38 antibody clone AT1 under non-reducing (NR) and reducing (R) conditions confirms antibody integrity and purity. A predominant band is observed at approximately 150 kDa under non-reducing conditions, corresponding to intact IgG, while reducing conditions show bands near 50 kDa and 25 kDa representing heavy and light chains, respectively, consistent with expected antibody structure.

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 widely expressed on plasma cells, activated T and B lymphocytes, natural killer cells, and additional immune cell populations, where it contributes to immune activation, differentiation, and intercellular communication. Because CD38 is frequently analyzed in complex immune environments with multiple co-expressed surface proteins, reliable and consistent antibody performance is essential for accurate interpretation of experimental data.

CD38 Antibody / Plasma Cell Marker Antibody (clone AT1) is a mouse monoclonal antibody developed for stable and reproducible detection of CD38 across immune cell populations. CD38 antibody, also referred to as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely used in studies of plasma cell biology, lymphocyte activation, and hematologic malignancy, where precise target recognition is required. Clone AT1 antibody provides consistent epitope-specific binding, supporting clear and repeatable identification of CD38-positive cells in diverse research systems.

As a monoclonal antibody, clone AT1 recognizes a single defined epitope on the CD38 protein, enabling uniform binding and reducing variability between experiments. This single-epitope targeting is particularly valuable in comparative studies, where consistent signal intensity and specificity are necessary to evaluate differences in expression levels or cellular distribution. The monoclonal format also supports reproducible results across different sample types and experimental conditions, making it well suited for longitudinal and multi-sample analyses.

Clone AT1 has been reported in multiple peer-reviewed publications, with approximately 27 studies referencing its use, supporting its role as a well-established reagent within the scientific literature. This level of publication presence indicates that the antibody has been repeatedly applied in independent research settings, providing additional confidence in its performance and reliability. The availability of published data further supports its use in studies requiring validated and widely recognized reagents.

CD38 expression is particularly prominent in plasma cells, where strong membranous and cytoplasmic localization allows clear identification of antibody-secreting cells within lymphoid tissues. In addition, CD38 is expressed on activated lymphocytes, enabling its use as a marker of immune activation and differentiation. This dual expression profile makes CD38 a versatile marker for studying both lineage identity and functional state within the immune system.

In hematologic and immunology research, CD38 is frequently evaluated in the context of plasma cell disorders, lymphoid malignancies, and immune microenvironment analysis. Detection of CD38-positive populations supports characterization of immune infiltration, assessment of lymphocyte activation status, and investigation of disease-associated changes in immune cell composition. The consistent performance of clone AT1 supports reliable identification of these populations across a range of experimental models.

The defined binding characteristics and reproducible performance of clone AT1 make it particularly useful in studies where consistency between experiments is critical. Its ability to generate stable and interpretable signal supports applications involving comparative analysis, biomarker evaluation, and immune profiling in both normal and disease contexts.

CD38 Antibody clone AT1 is therefore a well-characterized monoclonal reagent for CD38 detection, combining consistent epitope-specific binding with publication-supported use to enable reliable analysis of plasma cells, activated lymphocytes, and immune-related biological processes.

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 Clone AT1 should be determined by the researcher.

Immunogen

The human T cell line CCRF-CEM was used as the immunogen for the CD38 antibody.

Storage

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

Alternate Names

CD38 clone AT1 antibody, CD38 monoclonal antibody AT1, CD38 plasma cell marker antibody, CD38 ADPRC1 antibody, CD38 lymphocyte marker antibody