# CD38 Antibody for FACS / CD38 Flow Cytometry Antibody (RQ5801)

| Catalog No. | Formulation | Size |
|---|---|---|
| RQ5801 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

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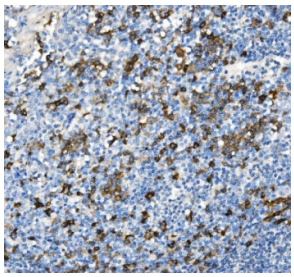
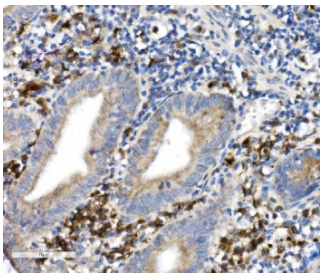
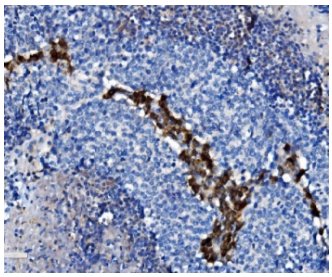
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Affinity purified |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide |
| **UniProt** | P28907 |
| **Applications** | Western Blot : 0.5-1ug/ml<br>Immunohistochemistry : 1-2ug/ml<br>Immunofluorescence : 2-4ug/ml<br>Flow Cytometry : 1-3ug/million cells |
| **Limitations** | This CD38 Antibody for FACS / CD38 Flow Cytometry Antibody is available for research use only. |



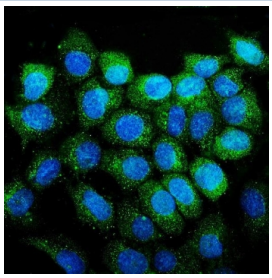
CD38 Antibody human tonsil IHC. Immunohistochemistry analysis of CD38 / plasma cell marker expression in FFPE human tonsil using a CD38 antibody. Strong membranous and cytoplasmic HRP-DAB brown staining highlights numerous plasma cells and activated lymphocytes within the tonsillar interfollicular regions, with scattered positive cells extending into germinal center-associated areas. The staining pattern demonstrates dense immune cell distribution with clear contrast against predominantly negative background lymphocytes. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



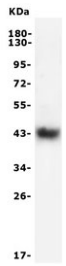
CD38 Antibody human appendicitis tissue IHC. Immunohistochemistry analysis of CD38 / plasma cell marker expression in FFPE human appendicitis tissue using a CD38 antibody. Strong membranous and cytoplasmic HRP-DAB brown staining highlights abundant plasma cells and activated lymphocytes within inflamed lamina propria and peri-glandular regions, with dense immune cell infiltration surrounding epithelial structures. The staining pattern demonstrates prominent immune activation associated with inflammatory pathology, while epithelial cells remain largely negative. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



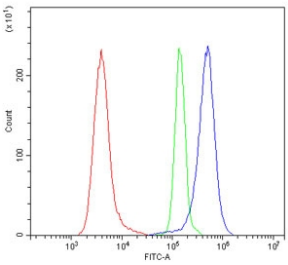
CD38 Antibody human lung cancer tissue IHC. Immunohistochemistry analysis of CD38 / plasma cell marker expression in FFPE human lung cancer tissue using a CD38 antibody. Strong membranous and cytoplasmic HRP-DAB brown staining highlights tumor-infiltrating plasma cells and activated lymphocytes within the tumor microenvironment, forming focal clusters along stromal and tumor interface regions. The staining pattern demonstrates immune cell infiltration associated with malignancy, while the majority of tumor cells remain negative. HIER was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



CD38 Antibody human A431 cells IF. Immunofluorescence analysis of CD38 / plasma cell marker expression in FFPE human A431 cells using a CD38 antibody (green). Signal is observed predominantly along the cell membrane and within the cytoplasm, outlining individual cells with a punctate to diffuse staining pattern, while nuclei are counterstained with DAPI (blue). The staining demonstrates cell surface-associated localization consistent with CD38 expression, with clear contrast between positive signal and nuclear regions. HIER was performed by steaming tissue sections in pH 6 citrate buffer for 20 minutes prior to antibody incubation.




CD38 Antibody human Raji lysate WB. Western blot analysis of CD38 / plasma cell marker expression in human Raji cell lysate using a CD38 antibody. A band is detected at approximately 40â€“45 kDa, consistent with the predicted molecular weight of CD38, with slight upward shift reflecting glycosylation of this cell surface protein. The observed band aligns with known expression of CD38 in B cell-derived lines.




CD38 Antibody for FACS. Flow cytometry analysis of CD38 / plasma cell marker expression in human Raji cells using CD38 Antibody for flow cytometry at 1 ug per million cells. The CD38 antibody (blue) demonstrates a clear right-shifted population compared to isotype control (green) and unstained cells (red), indicating strong cell surface expression of CD38. The distinct separation supports accurate gating and identification of CD38-positive B cell populations.

## Description

CD38 (CD38) is a type II transmembrane glycoprotein with ectoenzyme activity that regulates NAD metabolism and calcium signaling, and is prominently expressed on the surface of plasma cells, activated T and B lymphocytes, natural killer cells, and subsets of myeloid cells. Its tightly regulated surface expression varies with cellular activation and differentiation status, making CD38 a highly informative marker for resolving immune cell heterogeneity in flow cytometry-based analysis.

CD38 Antibody for FACS / CD38 Flow Cytometry Antibody is optimized for detection of CD38 on the cell surface, enabling precise identification, quantification, and isolation of CD38-positive populations in suspension-based assays. CD38 antibody, also known as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely incorporated into immunophenotyping panels where it supports discrimination of plasma cells, activated lymphocytes, and transitional immune subsets based on differential expression intensity.

In flow cytometry workflows, CD38 is most notably used to identify plasma cells, which display high-density surface expression and form a clearly separable CD38-bright population. This strong signal enables robust gating of plasma cells from surrounding lymphocyte populations, even in complex samples such as peripheral blood mononuclear cells or bone marrow aspirates. Activated B cells and T cells typically exhibit intermediate CD38 expression, while naÃƒÂ¯Ã‚Â¨ve or resting lymphocytes show low to minimal signal, creating a gradient of expression that supports multi-level population resolution.

CD38 is frequently used in combination with markers such as CD19, CD20, CD27, CD45, and CD138 to refine gating strategies and define specific immune subsets. For example, CD38-high populations in conjunction with B cell lineage markers support identification of plasma cells, while co-expression patterns with activation markers enable characterization of immune activation states. This makes CD38 an important component of multiparametric panels designed for detailed immune profiling and lineage tracking.

The surface accessibility of CD38 allows for staining of live, non-permeabilized cells, preserving cell viability and enabling downstream applications such as fluorescence-activated cell sorting. This is particularly advantageous for isolation of viable plasma cells or activated lymphocyte subsets for functional assays, transcriptomic analysis, or cell culture studies. The ability to detect CD38 without intracellular staining simplifies assay design and improves reproducibility in flow cytometry experiments.

In hematologic and immunology research, CD38 expression is commonly analyzed in bone marrow, peripheral blood, and lymphoid tissues to assess immune cell composition and differentiation status. Expanded CD38-positive populations are frequently observed in plasma cell disorders and other immune-related conditions, and flow cytometry provides a quantitative approach to evaluate these changes across large cell populations with high sensitivity.

The use of a rabbit polyclonal CD38 antibody provides broad epitope recognition, supporting strong and consistent detection of CD38 across cells with variable antigen density. This can enhance signal intensity and improve detection of dimly expressing populations, which is particularly important in heterogeneous samples where expression levels may span a wide range. The resulting staining profile supports clear separation of CD38-positive and CD38-negative populations during gating.

CD38 Flow Cytometry Antibody is therefore a powerful tool for immune cell phenotyping, population stratification, and cell sorting applications, enabling high-resolution analysis of plasma cells and activated lymphocyte subsets within complex biological samples.

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 for FACS / CD38 Flow Cytometry Antibody should be determined by the researcher.

## Immunogen

Amino acids EVHNLQPEKVQTLEAWVIHGGREDSRDLCQD from the human protein 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 flow cytometry antibody, CD38 cell surface marker antibody, CD38 lymphocyte marker antibody, CD38 plasma cell marker antibody, CD38 immune activation marker antibody