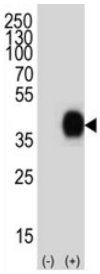
CD38 Antibody for IF / CD38 Immunofluorescence Antibody (F48288)

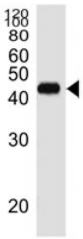
Catalog No.	Formulation	Size
F48288-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48288-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

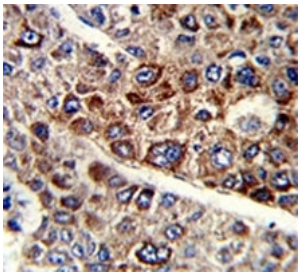
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Primate
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P28907
Applications	Western Blot : 1:1000-4000 IHC (Paraffin) : 1:50-1:100 Immunofluorescence : 1:10-1:50 Flow Cytometry : 1:10-1:50
Limitations	This CD38 Antibody for IF / CD38 Immunofluorescence Antibody is available for research use only.



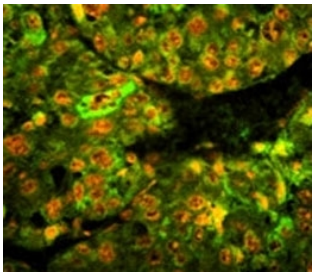
CD38 Antibody human 293T lysate WB. Western blot analysis of CD38 / plasma cell marker expression in human 293T cell lysate using a CD38 antibody diluted at 1:1000. A band is detected at approximately 40â€“45 kDa, consistent with the predicted molecular weight of CD38, with slight upward shift reflecting glycosylation of this cell surface protein.



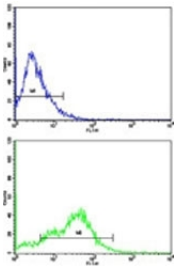
Western blot analysis of lysate from RPMI8226 cell line using CD38 antibody diluted at 1:1000.



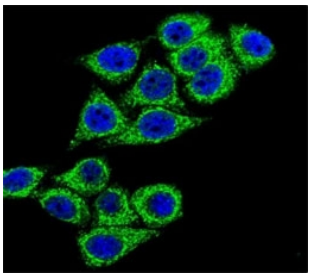
IHC analysis of FFPE human hepatocarcinoma with CD38 antibody



CD38 Antibody for IF human hepatocarcinoma tissue. Immunofluorescence analysis of CD38 / plasma cell marker expression in paraffin-embedded human hepatocarcinoma tissue using a CD38 antibody. Green fluorescence (FITC) highlights CD38 expression with predominantly membranous and cytoplasmic signal, while nuclei are counterstained with propidium iodide (red). The staining demonstrates localization of CD38-positive cells within the tumor microenvironment with clear contrast between fluorescent signal and nuclear regions.



Flow cytometric analysis of HepG2 cells using CD38 antibody (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



CD38 Antibody for IF human HeLa cells. Confocal immunofluorescence analysis of CD38 / plasma cell marker expression in human HeLa cells using a CD38 antibody. Green fluorescence from Alexa Fluor 488 highlights predominantly membranous and cytoplasmic staining with a punctate to diffuse distribution, outlining individual cells and indicating cell surface-associated localization. Nuclei are counterstained with DAPI (blue), providing clear contrast between nuclear and cytoplasmic compartments.

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 distribution at the plasma membrane, combined with intracellular trafficking and compartmentalization, makes CD38 particularly well suited for fluorescence-based imaging approaches that resolve both cell surface localization and subcellular organization.

CD38 Antibody for IF / CD38 Immunofluorescence Antibody is optimized for fluorescence detection of CD38, enabling high-resolution visualization of its spatial distribution in fixed cells and tissue sections. CD38 antibody, also known as

cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely used in immunofluorescence assays to examine immune cell architecture, activation states, and spatial relationships within complex cellular environments.

In immunofluorescence applications, CD38 staining typically appears as a strong membrane-associated signal outlining the cell surface, often accompanied by punctate or diffuse cytoplasmic fluorescence reflecting intracellular pools and vesicular trafficking. This dual localization pattern allows clear delineation of cell boundaries while also providing insight into intracellular distribution, making CD38 particularly useful for studying membrane dynamics and protein trafficking in immune cells.

The fluorescence-based detection of CD38 enables precise visualization of individual cells within densely populated samples, where membrane signal helps distinguish closely adjacent cells and supports analysis of cell-cell interactions. When combined with nuclear counterstains such as DAPI, CD38 staining provides strong contrast between membrane, cytoplasmic, and nuclear compartments, enhancing interpretation of cellular morphology and organization.

CD38 is frequently used in co-localization studies with additional immune or lineage markers, allowing simultaneous visualization of multiple targets within the same sample. This enables identification of specific cell subsets and functional states based on overlapping or complementary expression patterns. The ability to integrate CD38 into multicolor fluorescence panels makes it a valuable component of imaging-based immune profiling strategies.

The use of a rabbit polyclonal CD38 antibody provides broad epitope recognition, supporting strong fluorescence signal intensity and reliable detection across cells with variable antigen expression. This can improve visualization of both high-expressing plasma cells and lower-expressing activated lymphocyte populations within heterogeneous samples, ensuring consistent signal across a range of expression levels.

Immunofluorescence detection of CD38 is well suited for both cultured cells and tissue-derived specimens, where it enables detailed analysis of spatial distribution, membrane organization, and intracellular localization. Compared to chromogenic detection methods, fluorescence imaging provides enhanced resolution and multiplexing capability, allowing CD38-positive cells to be studied within the broader context of cellular networks and tissue architecture.

CD38 Immunofluorescence Antibody is therefore a powerful tool for high-resolution imaging, co-localization analysis, and spatial characterization of immune cell populations, supporting detailed investigation of plasma cells and activated lymphocytes within complex biological 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

Titration of the CD38 Antibody for IF / CD38 Immunofluorescence Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 241-270 from the human protein was used as the immunogen for this CD38 antibody.

Storage

Aliquot the CD38 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD38 immunofluorescence antibody, CD38 IF antibody, CD38 cell surface marker antibody, CD38 plasma cell marker antibody, CD38 immune activation marker antibody