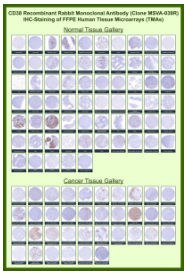
CD38 Antibody for IHC / CD38 Immunohistochemistry Antibody [clone MSVA-038R] (V6149)

Catalog No.	Formulation	Size
V6149-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6149-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-038R
UniProt	P28907
Localization	Membrane
Applications	Immunohistochemistry (FFPE) : 1:50-1:100
Limitations	This CD38 Antibody for IHC / CD38 Immunohistochemistry Antibody is available for research use only.



CD38 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of CD38 molecule / CD38 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal CD38 antibody clone MSVA-038R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong membranous and cytoplasmic localization in plasma cell populations within lymphoid tissues including tonsil, lymph node, and spleen, while most epithelial and stromal compartments remain largely negative. Within tumor tissue microarrays, CD38-positive tumor-infiltrating immune cells are observed with variable density, supporting evaluation of immune cell distribution in the tumor microenvironment. Evaluation across large TMA panels enables direct comparison of CD38 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CD38 expression profiles in the Human Protein Atlas.

Description

CD38 (CD38) is a multifunctional type II transmembrane glycoprotein that functions as an ectoenzyme regulating NAD

metabolism and calcium signaling, with well-established expression on plasma cells, activated T and B lymphocytes, and additional immune effector populations. As a member of the ADP-ribosyl cyclase family, CD38 plays a central role in immune activation, cellular differentiation, and intercellular signaling within lymphoid tissues, where it contributes to both immune cell communication and metabolic regulation.

CD38 Antibody for IHC / CD38 Immunohistochemistry Antibody (clone MSVA-038R) is specifically suited for detection of CD38 expression in formalin-fixed, paraffin-embedded tissues, enabling high-contrast visualization of plasma cells and activated immune populations within intact tissue architecture. CD38 antibody, also referred to as cyclic ADP-ribose hydrolase antibody or ADPRC1 antibody, is widely used to identify plasma cell-rich compartments and characterize immune infiltrates across a broad spectrum of normal and disease-associated tissues.

Immunohistochemical staining with clone MSVA-038R demonstrates strong membranous and cytoplasmic labeling of plasma cells, producing a distinct and reproducible staining pattern that allows clear identification of these cells within lymphoid organs such as tonsil, lymph node, spleen, and bone marrow. Plasma cells exhibit intense staining relative to surrounding lymphocytes, enabling precise recognition of plasma cell populations and facilitating evaluation of lymphoid tissue organization. This clear contrast is particularly valuable in distinguishing plasma cells from other mononuclear cell types in both reactive and neoplastic conditions.

In tissue microarray analysis of normal human tissues, CD38 expression detected by this clone is largely restricted to hematopoietic and immune cell compartments, with minimal to absent staining observed in epithelial, stromal, and parenchymal cells. This restricted expression profile results in low background staining and high interpretability, even across diverse tissue types. Scattered CD38-positive cells identified in non-lymphoid tissues represent resident or infiltrating immune cells rather than intrinsic expression by the tissue itself, supporting the specificity of CD38 as an immune cell marker in histologic analysis.

In cancer tissue microarrays, CD38 staining highlights tumor-infiltrating immune cells, particularly plasma cells and activated lymphocytes within the tumor microenvironment. These CD38-positive immune infiltrates are observed across multiple tumor types with variable density, often forming discrete clusters or diffuse distributions within tumor stroma. Importantly, most non-hematologic tumor cells show little to no staining, reinforcing the utility of CD38 in distinguishing immune cell populations from malignant epithelial or mesenchymal components. This feature supports evaluation of immune contexture and tumor-associated inflammatory responses in FFPE tissue specimens.

The staining characteristics of clone MSVA-038R demonstrate a strong signal-to-noise profile, with consistent membranous and cytoplasmic labeling and minimal non-specific background. This performance supports reliable visualization of immune cell populations in both single-tissue sections and high-throughput tissue microarray formats. The reproducibility of staining across a wide range of normal and cancer tissues makes this antibody well suited for comparative histologic studies and large-scale tissue screening applications.

CD38 antibody staining is particularly valuable in the study of plasma cell biology and hematologic malignancies, where identification of CD38-positive populations contributes to assessment of plasma cell distribution, immune activation status, and lymphoid tissue organization. In addition, its ability to highlight immune infiltration in solid tumors provides important context for investigations of tumor immunology and host immune response. These combined attributes position CD38 Immunohistochemistry Antibody clone MSVA-038R as a robust tool for tissue-based analysis of immune cell populations and microenvironmental composition.

This antibody is part of our CD38 antibody collection, which includes application-specific formats for immunohistochemistry, flow cytometry, western blot, and immunofluorescence research.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the CD38 Antibody for IHC / CD38 Immunohistochemistry Antibody should be determined by the researcher.

2. This CD38 / CD38 molecule antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

Synthetic peptide corresponding to residues within amino acids 200-300 of human CD38 (exact sequence is proprietary) was used as the immunogen for the CD38 / CD38 molecule antibody.

Storage

CD38 / CD38 molecule antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

CD38 plasma cell marker antibody, CD38 immunohistochemistry antibody, CD38 lymphocyte marker antibody, CD38 membrane protein antibody, CD38 immune activation marker antibody