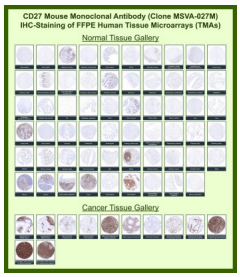
CD27 Antibody for IHC / CD27 Immunohistochemistry Antibody [clone MSVA-027M] (V6146)

Catalog No.	Formulation	Size
V6146-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6146-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MSVA-027M
Purity	Protein A affinity
UniProt	P26842
Localization	Membrane
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This CD27 Antibody for IHC is available for research use only.



CD27 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of CD27 molecule CD27, also known as TNFRSF7, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal CD27 antibody clone MSVA-027M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong membranous localization in lymphocyte-rich tissues including tonsil, lymph node, spleen, and thymus, highlighting activated and memory T and B lymphocyte populations, while most non-lymphoid tissues remain largely negative. Within tumor tissue microarrays, CD27-positive tumor-infiltrating lymphocytes are detected across multiple malignancies, with strong and diffuse staining observed in lymphoid neoplasms consistent with B cell lineage origin. Evaluation across large TMA panels enables direct comparison of CD27 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CD27 expression profiles in the Human Protein Atlas, supporting its use as a lymphocyte marker and indicator of the immune microenvironment.

Description

CD27, also known as TNF receptor superfamily member 7 (TNFRSF7), is a type I transmembrane receptor expressed on T lymphocytes, memory B cells, and subsets of natural killer cells where it functions as a critical regulator of adaptive immune activation. CD27 Antibody for IHC / CD27 Immunohistochemistry Antibody (clone MSVA-027M) is specifically suited for immunohistochemical analysis of lymphocyte distribution within tissue architecture, enabling clear visualization of CD27-positive immune populations in formalin-fixed, paraffin-embedded specimens. CD27 antibody reagents are widely applied in immunohistochemistry to define immune cell compartments, characterize lymphoid organization, and assess tumor-associated immune infiltration in both normal and diseased tissues.

CD27 antibody, also referred to as TNFRSF7 antibody or CD27 lymphocyte marker antibody in the literature, is particularly valuable for identifying activated and memory lymphocyte subsets in situ. Through interaction with its ligand CD70, CD27 promotes lymphocyte survival, proliferation, and differentiation, linking its expression directly to immune activation status. In immunohistochemistry, CD27 exhibits a predominantly membranous staining pattern in lymphocytes, providing strong contrast against surrounding negative parenchymal cells and enabling confident identification of CD27-positive immune populations within complex tissue environments.

A key strength of CD27 Antibody for IHC / CD27 Immunohistochemistry Antibody (clone MSVA-027M) is its performance in tissue microarray-based validation, where consistent staining across a broad panel of normal and cancer tissues supports both specificity and reproducibility. Tissue microarrays allow simultaneous evaluation of dozens of tissue types under standardized conditions, making them highly effective for assessing antibody performance in immunohistochemistry. The extensive TMA dataset associated with clone MSVA-027M demonstrates reliable detection of CD27-positive lymphocytes across multiple organ systems while maintaining low background in non-target tissues, an essential feature for high-confidence immunohistochemical interpretation.

In normal tissue microarrays, CD27 immunohistochemistry staining is strongly enriched in lymphocyte-dense tissues including tonsil, lymph node, spleen, and thymus, where membranous staining highlights T cell zones and memory B cell compartments. Additional staining may be observed in scattered immune cells within mucosal and peripheral tissues, reflecting physiologic immune surveillance. In contrast, epithelial, stromal, and parenchymal cells across a wide range of tissues show minimal to absent staining, reinforcing the specificity of CD27 antibody detection for lymphoid cell populations and improving signal-to-noise characteristics in immunohistochemistry assays.

In cancer tissue microarrays, CD27-positive lymphocytes are readily detected within tumor microenvironments, where they contribute to the immune landscape of both hematologic and solid malignancies. Strong and diffuse staining in lymphoid cancers such as diffuse large B-cell lymphoma and Hodgkin lymphoma reflects CD27 expression in malignant or reactive lymphocyte populations. In solid tumors, CD27 antibody staining highlights tumor-infiltrating lymphocytes, providing valuable context for assessing immune infiltration patterns and supporting studies of tumor immunology and immune response dynamics in immunohistochemistry-based analyses.

The mouse monoclonal clone MSVA-027M antibody is designed to deliver consistent and reproducible staining performance in immunohistochemistry, with clear membranous signal and low non-specific background in FFPE tissues. Its demonstrated compatibility with tissue microarray formats further supports its use in large-scale tissue profiling, biomarker validation, and comparative expression studies. This makes it particularly well suited for research focused on lymphocyte localization, immune microenvironment characterization, and evaluation of CD27 as a marker of T cell activation and memory B cell differentiation.

Overall, CD27 Antibody for IHC / CD27 Immunohistochemistry Antibody (clone MSVA-027M) provides robust and reliable detection of CD27 in tissue sections, with strong tissue microarray-supported performance that enables precise identification of lymphocyte populations across diverse normal and cancer tissues in immunohistochemistry applications.

This antibody is part of a broader CD27 antibody collection designed to support diverse immunological research applications.

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 CD27 Antibody for IHC / CD27 Immunohistochemistry Antibody should be determined by the researcher.

2. 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

Recombinant human CD27 protein fragment (amino acids 28-170) (exact sequence is proprietary) was used as the immunogen for the CD27 Antibody for IHC.

Storage

CD27 Antibody for IHC with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

TNFRSF7 IHC antibody, CD27 immunohistochemistry antibody, CD27 lymphocyte marker antibody for IHC, CD27 T cell marker antibody for FFPE tissue, CD27 memory B cell marker antibody for immunohistochemistry