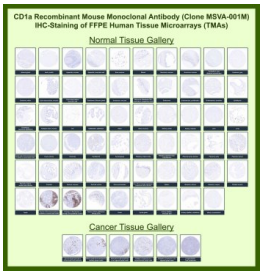
CD1A Antibody for IHC / CD1a Immunohistochemistry Antibody [clone MSVA-001M] (V6138)

Catalog No.	Formulation	Size
V6138-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6138-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	MSVA-001M
UniProt	P06126
Localization	Cell membrane, Endosome membrane, Membrane raft
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This CD1A / CD1a molecule antibody is available for research use only.



CD1A Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of CD1a molecule / CD1A in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal CD1A antibody clone MSVA-001M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates membranous and cytoplasmic localization in dendritic cell populations, with strong signal observed in Langerhans cells within epithelial tissues, while most non-immune cell types remain largely negative. Within tumor tissue microarrays, positive staining highlights tissue-resident antigen-presenting cells and infiltrating dendritic cells, supporting evaluation of immune cell distribution and microenvironment composition. Evaluation across large TMA panels enables direct comparison of CD1A expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CD1A expression profiles in the Human Protein Atlas.

Description

CD1 molecule alpha 1 (CD1A) is a transmembrane glycoprotein encoded by the CD1A gene that functions in lipid antigen presentation to T cells and is widely recognized as a marker of dendritic cells, particularly Langerhans cells within

epithelial tissues. CD1A Antibody for IHC enables detection of CD1a protein in formalin-fixed, paraffin-embedded samples, supporting detailed evaluation of tissue distribution, cellular localization, and immune cell presence within intact histological architecture. CD1A antibody, also known as CD1a antibody or T-cell surface glycoprotein CD1a antibody, is frequently used in immunohistochemistry to visualize antigen-presenting cell populations across a broad range of tissues.

In immunohistochemistry, CD1a staining is characterized by distinct membranous and cytoplasmic labeling of dendritic cells, allowing clear identification of these cells within stratified epithelia and lymphoid-associated tissues. Strong staining is typically observed in Langerhans cells of the epidermis and mucosal surfaces, as well as in cortical thymocytes, while most parenchymal cells in other organs show little to no signal. This selective staining pattern provides high contrast in FFPE sections and enables reliable recognition of dendritic cell morphology and distribution within tissue compartments.

Recombinant mouse monoclonal clone MSVA-001M supports consistent staining performance in immunohistochemistry and demonstrates robust detection of CD1a across tissue microarray (TMA) panels containing a wide spectrum of normal and cancer tissues. In normal tissue arrays, CD1a positivity is largely restricted to dendritic cell populations, with strong staining in skin and thymus and sparse distribution in other epithelial and lymphoid sites. In cancer tissue arrays, CD1a staining highlights infiltrating immune cells within the tumor microenvironment rather than tumor cells themselves, enabling visualization of immune infiltration patterns across different tumor types.

Tissue microarray-based immunohistochemistry allows side-by-side comparison of staining patterns across dozens of tissue types under standardized experimental conditions. A CD1A Antibody for IHC evaluated in TMA format provides a comprehensive view of CD1a distribution, revealing consistent localization to antigen-presenting cells and supporting interpretation of immune cell presence in both normal and diseased tissues. This approach is particularly useful for assessing staining specificity, reproducibility, and biological relevance across diverse sample sets.

CD1A Antibody for IHC is therefore well suited for studies examining tissue-resident dendritic cells, epithelial immune surveillance, and immune cell infiltration in pathological samples. Its ability to produce clear, cell-specific staining in FFPE sections enables detailed assessment of CD1a-positive cell distribution within tissue architecture, supporting both basic research and translational investigations of immune cell localization.

A full range of CD1A antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD1A Antibody collection page.

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 CD1A Antibody for IHC / CD1a Immunohistochemistry Antibody should be determined by the researcher.

2. This CD1A / CD1a molecule antibody is recombinantly produced by expression in human HEK293 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

Recombinant full-length human CD1a protein was used as the immunogen for the CD1A Antibody for IHC / CD1a Immunohistochemistry Antibody.

Storage

CD1A / CD1a molecule antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

CD1a IHC antibody, CD1A immunohistochemistry antibody, Langerhans cell marker antibody, dendritic cell IHC antibody, CD1a tissue staining antibody

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