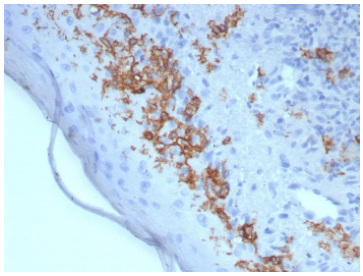
CD1A Antibody / Tumor Immune Infiltration Marker Antibody [clone rC1A/8110] (V4750)

Catalog No.	Formulation	Size
V4750-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4750-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4750SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rC1A/8110
Purity	Protein A/G affinity
UniProt	P06126
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD1A antibody is available for research use only.



CD1A Antibody for IHC. Immunohistochemistry analysis of CD1A / CD1a expression in FFPE human skin tissue using CD1A Antibody. Membranous and cytoplasmic staining is observed in dendritic cells within the epidermis and superficial dermis, consistent with Langerhans cell localization, while surrounding keratinocytes remain largely negative. The presence of CD1a-positive cells at the epithelial interface reflects immune cell infiltration and supports evaluation of antigen-presenting dendritic cells within tissue microenvironments. HIER: boil tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes and allow to cool before testing.

Description

CD1 molecule alpha 1 (CD1A) is a transmembrane glycoprotein encoded by the CD1A gene that functions in lipid antigen

presentation and is expressed on dendritic cells involved in immune surveillance. CD1A antibody, also known as CD1a antibody or T-cell surface glycoprotein CD1a antibody, enables detection of antigen-presenting cells within tumor-associated tissues. CD1A Antibody is particularly useful for evaluating dendritic cell infiltration within the tumor microenvironment and for characterizing immune cell composition in cancer tissues.

In solid tumors, dendritic cells play a central role in initiating anti-tumor immune responses by capturing tumor-derived antigens and presenting them to T cells. CD1a-positive dendritic cells are frequently located within tumor stroma, at invasive tumor margins, or in peritumoral regions, where they contribute to immune recognition and modulation of local immune activity. Detection of CD1a therefore provides insight into the presence, density, and spatial distribution of antigen-presenting cells within tumor tissues.

Immunohistochemical analysis of CD1a allows visualization of dendritic cell infiltration patterns across different tumor types, supporting evaluation of immune microenvironment heterogeneity. The abundance and localization of CD1a-positive cells can vary depending on tumor biology, stage, and immune status, making CD1A a useful marker for studying tumor-immune interactions. In some contexts, increased dendritic cell presence reflects active immune surveillance, while in others it may indicate altered or suppressed immune function within the tumor microenvironment.

CD1a expression can also be used to assess immune cell recruitment and activation in response to therapeutic interventions, including immunomodulatory treatments. Changes in CD1a-positive cell distribution may provide insight into how tumors interact with the immune system and how immune cell populations respond to external stimuli.

CD1A Antibody is therefore well suited for studies focused on tumor immune infiltration and microenvironment analysis. Its use supports identification of dendritic cells within tumor tissues and enables detailed investigation of immune cell distribution, tumor-associated immune responses, and the dynamics of antigen-presenting cell populations in cancer biology.

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

Application Notes

Optimal dilution of the CD1A Antibody / Tumor Immune Infiltration Marker Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human CD1a protein was used as the immunogen for the CD1A Antibody / Tumor Immune Infiltration Marker Antibody.

Storage

Aliquot the CD1A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD1a antibody, tumor immune infiltration marker antibody, dendritic cell tumor microenvironment antibody, CD1A immune cell infiltration antibody, T-cell surface glycoprotein CD1a antibody

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