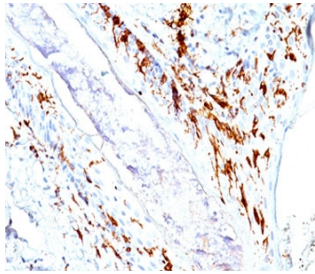


CD1A Antibody / Inflammatory Response Marker Antibody [clone O10 + C1A/711] (V2027)

Catalog No.	Formulation	Size
V2027-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2027-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2027SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2027IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	O10 + C1A/711
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	909
Localization	Cell surface, cytoplasmic
Applications	Flow Cytometry : 0.5-1ug/10 ⁶ cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/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 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. Increased density and clustering of CD1a-positive cells at the epithelial interface supports involvement of antigen-presenting dendritic cells in local inflammatory responses and immune activation within skin.

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 activation. CD1A antibody, also known as CD1a antibody or T-cell surface glycoprotein CD1a antibody, enables detection of antigen-presenting cells that participate in inflammatory responses across a range of tissues. CD1A Antibody is particularly useful for studying immune activation and dendritic cell dynamics in inflammatory conditions.

Dendritic cells expressing CD1a play a central role in initiating inflammation by capturing antigens and activating T cells through antigen presentation. In inflamed tissues, CD1a-positive cells are often increased in number and redistributed within epithelial and stromal compartments, reflecting recruitment and activation of antigen-presenting cells. This makes CD1A a useful marker for evaluating the cellular composition of inflammatory infiltrates and for identifying immune activation at sites of tissue injury or infection.

In tissue-based analyses, CD1a-positive dendritic cells can be observed within inflamed skin, mucosal surfaces, and other barrier tissues, where they contribute to cytokine signaling and immune cell recruitment. Their presence is associated with active immune responses and reflects engagement of antigen-presenting pathways. Detection of CD1a therefore provides insight into the intensity and localization of inflammatory activity within tissues.

CD1a expression is also influenced by cytokines and environmental signals that regulate immune responses, and changes in CD1a-positive cell populations are associated with inflammatory disorders such as dermatitis, infection, and immune-mediated disease. Monitoring CD1A expression can therefore help characterize immune activation states and provide insight into how dendritic cells contribute to inflammatory processes.

CD1A Antibody is therefore well suited for studies focused on inflammatory responses and immune activation. Its use supports identification of dendritic cells involved in inflammation and enables investigation of cellular mechanisms that drive immune-mediated tissue responses and antigen-presenting cell recruitment.

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

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD1A Antibody / Inflammatory Response Marker Antibody to be titrated up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human thymus cells (O10) and recombinant human CD1a protein (C1A/711) were used as the immunogens for this CD1A Antibody / Inflammatory Response Marker Antibody.

Storage

Store the CD1a antibody cocktail at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD1a antibody, inflammatory immune marker antibody, CD1A inflammation-associated antibody, dendritic cell inflammation marker antibody, T-cell surface glycoprotein CD1a antibody

References (4)