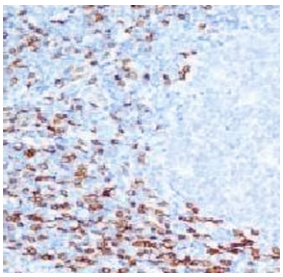
CD8A Antibody / Immune Checkpoint Response Marker Antibody [clone CLDA8a-1] (V7034)

Catalog No.	Formulation	Size
V7034-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7034-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7034SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7034IHC-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	CLDA8a-1
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	925
Localization	Cell surface
Applications	Immunohistology (FFPE) : 1-2ug/ml for 30 min at RT (1) Prediluted IHC Only Format : incubate for 30 min at RT (2)
Limitations	This CD8A Antibody / Immune Checkpoint Response Marker Antibody is available for research use only.



CD8A Antibody Tonsil Tissue IHC. Immunohistochemistry analysis of CD8 alpha (CD8A) in FFPE human tonsil tissue shows membranous staining of cytotoxic T lymphocytes within lymphoid regions, consistent with CD8-positive cells participating in immune responses associated with checkpoint-regulated T cell activity and supporting detection of this immune checkpoint response marker in secondary lymphoid tissue (clone CLDA8a-1). Heat-induced epitope retrieval was performed in pH 9 10 mM Tris with 1 mM EDTA for 10-20 minutes followed by cooling at room temperature.

Description

CD8 alpha (CD8A) is a transmembrane glycoprotein expressed on cytotoxic T lymphocytes, where it functions as a co-receptor for T cell receptor signaling through interaction with MHC class I molecules. CD8A Antibody / Immune Checkpoint Response Marker Antibody is widely used to evaluate cytotoxic T cell responses in systems where checkpoint signaling pathways regulate immune activation and effector function. CD8A antibody, also referred to as CD8 alpha antibody or CD8 antigen antibody, enables direct detection of T cells responsible for antigen-specific cytotoxic activity in both normal and disease-associated tissues.

CD8A is localized to the plasma membrane and plays a central role in stabilizing antigen recognition and promoting downstream signaling events required for T cell activation. In the context of checkpoint regulation, cytotoxic T lymphocytes represent the primary effector population capable of recognizing and eliminating target cells following release of inhibitory signaling constraints. Detection of CD8A therefore provides a direct measure of the presence and distribution of these effector cells within tissues and cellular systems.

CD8A Antibody / Immune Checkpoint Response Marker Antibody is commonly used in immunohistochemistry to visualize CD8-positive lymphocyte infiltration within tissues, in flow cytometry to quantify cytotoxic T cell populations, and in immunofluorescence to examine spatial relationships between T cells and their targets. These approaches enable assessment of how cytotoxic T cells are positioned relative to other cellular components within the immune microenvironment.

In tumor-associated systems, CD8-positive T cells are frequently examined in relation to immune activation states, infiltration patterns, and changes following modulation of checkpoint pathways. Increased presence or redistribution of CD8-positive lymphocytes can reflect altered immune activity, making CD8A detection a useful indicator of cytotoxic T cell involvement in immune responses. In infectious disease and inflammatory models, CD8-positive T cells similarly contribute to clearance of infected or abnormal cells following activation.

CD8A Antibody supports investigation of immune responses in systems where checkpoint signaling influences T cell activity. It is often used alongside markers of activation, inhibition, and cellular function to evaluate the state and behavior of cytotoxic lymphocytes within complex biological environments.

Detection of CD8A-positive T cells provides insight into cytotoxic immune responses and the distribution of effector lymphocytes in tissues where immune regulation is active. This supports studies of T cell-mediated immunity, immune modulation, and the cellular mechanisms underlying regulated immune responses.

This antibody is part of a broader selection of immune cell marker antibodies designed to support studies of T cell biology, immune infiltration, and tumor immunology, including application-specific CD8A antibody reagents for IHC, FACS, WB, and IF.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD8A Antibody / Immune Checkpoint Response Marker Antibody to be titered up or down for optimal performance.

1. 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 recombinant protein was used as the immunogen for this CD8a antibody.

Storage

CD8a antibody with azide can be stored at 2-8oC. The azide-free format should be aliquoted and stored at -20oC or colder.

Alternate Names

CD8A immune checkpoint response marker antibody, CD8 alpha immunotherapy marker antibody, CD8A T cell response antibody, CD8A immune response marker antibody, CD8A checkpoint therapy marker antibody

References (1)