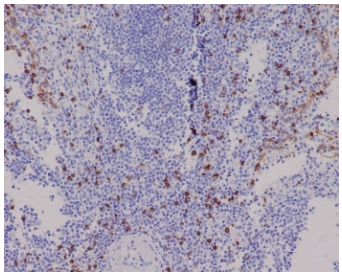
CD8A Antibody / Tumor Immune Microenvironment Marker Antibody [clone BDG-3] (RQ4977)

Catalog No.	Formulation	Size
RQ4977	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	BDG-3
Purity	Affinity purified
UniProt	P01732
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1:50-1:200
Limitations	This CD8A Antibody / Tumor Immune Microenvironment Marker Antibody is available for research use only.



CD8A Antibody Spleen IHC. Immunohistochemistry analysis of CD8 alpha (CD8A) in FFPE human spleen tissue shows membranous staining of cytotoxic T lymphocytes distributed throughout lymphoid regions, consistent with CD8-positive immune cell populations and supporting detection of this tumor immune microenvironment marker in lymphoid tissue. Heat-induced epitope retrieval was performed in pH 6, 10 mM citrate buffer for 10-20 minutes followed by cooling prior to antibody incubation.

Description

CD8 alpha (CD8A) is a transmembrane glycoprotein expressed on cytotoxic T lymphocytes and functions as a co-receptor for T cell receptor signaling through interaction with MHC class I molecules. CD8A Antibody / Tumor Immune

Microenvironment Marker Antibody is widely used to study the composition, organization, and distribution of immune cells within tumor tissues, where CD8-positive T lymphocytes represent a major effector population involved in tumor recognition and elimination. CD8A antibody, also referred to as CD8 alpha antibody or CD8 antigen antibody, enables visualization of cytotoxic T cells within complex tumor-associated environments.

CD8A is localized to the plasma membrane, making it highly suitable for tissue-based detection of immune cell populations. Within tumors, CD8-positive T cells may localize to tumor nests, stromal regions, invasive margins, or perivascular areas, and these spatial patterns can provide insight into immune accessibility and tumor-immune interactions. Detection of CD8A therefore supports detailed characterization of immune cell distribution within the tumor microenvironment.

CD8A Antibody / Tumor Immune Microenvironment Marker Antibody is commonly used in immunohistochemistry to evaluate immune infiltration patterns and in multiplex imaging to examine relationships between tumor cells and surrounding immune populations. These approaches allow visualization of how cytotoxic lymphocytes are positioned relative to malignant cells and other stromal components within the tissue architecture.

In cancer biology, the presence and distribution of CD8-positive T cells are closely associated with immune surveillance and cytotoxic activity directed against tumor cells. Differences in CD8-positive cell density and localization can reflect variations in immune engagement and tumor-associated immune dynamics. CD8A detection is therefore widely used to assess immune landscapes across different tumor types and experimental conditions.

CD8A Antibody supports investigation of cellular interactions within the tumor microenvironment by enabling clear identification of cytotoxic lymphocytes in situ. It is frequently used in combination with additional markers to define immune cell subsets and to evaluate how immune populations are organized within tumor tissues.

Detection of CD8A-positive T cells provides insight into the cellular composition and spatial organization of the tumor immune microenvironment. This supports studies of tumor biology, immune cell distribution, and the interactions that influence disease progression and 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

Optimal dilution of the CD8A Antibody / Tumor Immune Microenvironment Marker Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human CD8 alpha / CD8A was used as the immunogen for the CD8 alpha antibody.

Storage

Store the CD8 alpha antibody at -20oC.

Alternate Names

CD8A tumor microenvironment marker antibody, CD8 alpha tumor immune marker antibody, CD8A tumor immune cell antibody, CD8A cancer immune marker antibody, CD8A tumor lymphocyte marker antibody