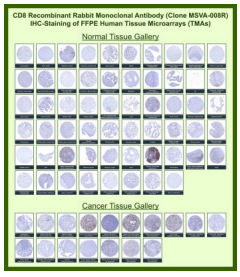
CD8A Antibody for IHC / CD8 Immunohistochemistry Antibody [clone MSVA-008R] (V6143)

Catalog No.	Formulation	Size
V6143-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6143-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-008R
UniProt	P01732
Localization	Cell membrane, Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This CD8A Antibody for IHC / CD8 Immunohistochemistry Antibody is available for research use only.



CD8A Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of CD8 alpha chain / CD8A in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal CD8A antibody clone MSVA-008R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong membranous localization in cytotoxic T lymphocyte populations, with enrichment in lymphoid tissues such as tonsil and lymph node, while most non-immune cell types remain largely negative. Within tumor tissue microarrays, variable densities of CD8-positive tumor-infiltrating lymphocytes are observed across multiple cancer types, supporting its use as a marker of immune infiltration and tumor immune microenvironment characterization. Evaluation across large TMA panels enables direct comparison of CD8A expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CD8A expression profiles in the Human Protein Atlas.

Description

CD8 alpha (CD8A) is a transmembrane glycoprotein expressed on cytotoxic T lymphocytes that functions as a co-receptor for T cell receptor signaling through interaction with MHC class I molecules. CD8A Antibody for IHC is widely used to detect and localize cytotoxic T cells within tissue sections, making it a critical immunohistochemistry marker for evaluating immune infiltration in both normal and cancer tissues. CD8A antibody, also referred to as CD8 alpha antibody or CD8 antigen antibody, is one of the most established markers for identifying tumor-infiltrating lymphocytes in FFPE specimens.

CD8A belongs to the immunoglobulin superfamily and is localized to the cell membrane, where it forms heterodimers with CD8B or homodimers in specific immune subsets. In immunohistochemistry applications, CD8A staining produces clear membranous labeling of lymphocytes, enabling precise visualization of cytotoxic T cells within complex tissue architecture. This membranous staining pattern allows CD8A immunohistochemistry antibody detection to reliably distinguish infiltrating lymphocytes from surrounding epithelial cells, stromal compartments, and tumor cells, supporting accurate interpretation in pathology and research settings.

CD8A Antibody for IHC is particularly important in immuno-oncology, where the density and spatial distribution of CD8-positive T cells are closely linked to prognosis and response to immunotherapy. Increased infiltration of CD8-positive lymphocytes within tumor regions is commonly associated with improved clinical outcomes and enhanced response to checkpoint blockade therapies. As a result, CD8 immunohistochemistry antibody staining is widely used to assess tumor immune contexture, characterize tumor-infiltrating lymphocytes, and support studies of immune activation, immune exclusion, and tumor-immune interactions across diverse cancer types.

This recombinant rabbit monoclonal antibody, clone MSVA-008R, is optimized for immunohistochemistry and demonstrates strong performance in formalin-fixed, paraffin-embedded tissues. Validation using human tissue microarray (TMA) panels provides broad evidence of staining consistency and specificity across a wide range of normal and cancer tissues. In TMA-based immunohistochemistry analysis, CD8A staining reveals scattered cytotoxic T cells in most non-lymphoid tissues, with strong enrichment in lymphoid organs such as tonsil, lymph node, and spleen. In cancer tissues, variable densities of CD8-positive lymphocyte infiltration are observed, reflecting differences in tumor immune microenvironments and supporting the use of CD8A antibody for immune profiling studies.

TMA validation is especially valuable for CD8A antibody performance assessment because it enables side-by-side comparison across dozens of tissue types under identical staining conditions. CD8A antibody staining in these arrays aligns with known biological distribution patterns, showing minimal background staining in non-immune cells and strong, specific membranous labeling of infiltrating lymphocytes. This level of cross-tissue validation supports reproducibility and confidence in immunohistochemistry results, particularly in studies requiring consistent detection across multiple tissue types.

CD8A immunohistochemistry antibody staining is also widely used in spatial biology and multiplex IHC approaches, where understanding the localization of cytotoxic T cells relative to tumor cells, vasculature, and stromal compartments is critical. CD8A antibody enables visualization of immune cell positioning within tumor nests, invasive margins, and peritumoral regions, providing insight into immune accessibility and tumor immune evasion mechanisms. When used in combination with markers such as CD3 antibody, CD4 antibody, and PD-1 or PD-L1 antibodies, CD8A Antibody for IHC supports comprehensive characterization of immune composition and functional state within tissue microenvironments, making it a cornerstone reagent for immunohistochemistry-based immune analysis.

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.

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 CD8A Antibody for IHC / CD8 Immunohistochemistry Antibody antibody should be determined by the researcher.

2. This CD8A / CD8 alpha chain 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

A synthetic peptide corresponding to CD8alpha (within amino acids 135-235) was used as the immunogen for the CD8A / CD8 alpha chain antibody.

Storage

CD8A / CD8 alpha chain antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

CD8A IHC antibody, CD8 alpha immunohistochemistry antibody, CD8 tumor infiltrating lymphocyte marker antibody, CD8A FFPE tissue antibody, CD8A TMA validated antibody

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