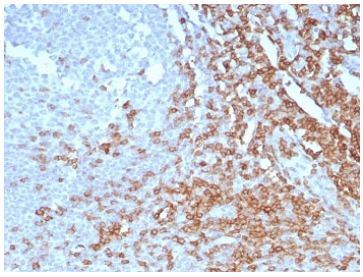
CD7 Antibody CD7/7605 / Cytotoxic Lymphocyte Marker Antibody [clone CD7/7605] (V4554)

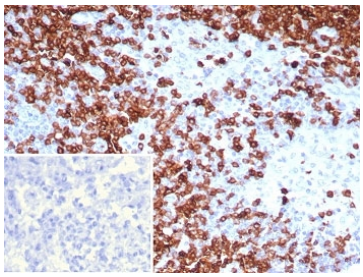
Catalog No.	Formulation	Size
V4554-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4554-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4554SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

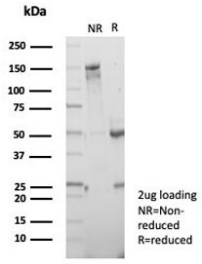
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	CD7/7605
Purity	Protein A/G affinity
UniProt	P09564
Localization	Cell Surface
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD7 Antibody CD7/7605 / Cytotoxic Lymphocyte Marker Antibody is available for research use only.



CD7 Antibody CD7/7605 Tonsil IHC. Immunohistochemistry analysis of CD7 / T-cell antigen CD7 in human tonsil tissue demonstrates strong HRP-DAB brown membranous staining of lymphocytes within interfollicular regions with relative sparing of germinal centers, consistent with CD7 expression on cytotoxic lymphocyte populations including effector T cells, while surrounding areas remain largely negative. CD7 antibody clone CD7/7605 was applied following heat-induced epitope retrieval in pH 9 Tris-EDTA buffer, supporting its use as a cytotoxic lymphocyte marker in FFPE tissue sections.



CD7 Antibody Human Lymph Node IHC. Immunohistochemistry analysis of CD7 / T-cell antigen CD7 in human lymph node tissue shows strong HRP-DAB brown membranous staining of lymphocytes within paracortical regions with relative sparing of germinal centers, consistent with CD7 expression on cytotoxic lymphocyte populations, while surrounding areas remain largely negative. The inset shows absence of staining when PBS is used in place of primary antibody, confirming specificity. CD7 antibody clone CD7/7605 was applied following heat-induced epitope retrieval in pH 9 Tris-EDTA buffer, supporting its use as a cytotoxic lymphocyte marker in FFPE tissue sections.



SDS-PAGE analysis of purified, BSA-free CD7 antibody (clone CD7/7605) as confirmation of integrity and purity.

Description

Cluster of Differentiation 7 (CD7) is a transmembrane glycoprotein (CD7) expressed on T lymphocytes and natural killer (NK) cells, where it contributes to immune signaling, activation, and effector function. CD7 Antibody CD7/7605 / Cytotoxic Lymphocyte Marker Antibody is uniquely positioned for studying cytotoxic immune cell populations, enabling detection of CD7 in effector T cells and NK cells that mediate immune defense against infected, stressed, or malignant target cells.

CD7 antibody, also referred to as T-cell antigen CD7 antibody, is expressed on cytotoxic lymphocyte populations that play central roles in immune surveillance and host defense. These include CD8-positive cytotoxic T cells and NK cells, both of which are responsible for identifying and eliminating target cells through direct cytotoxic mechanisms. CD7 expression supports identification and characterization of these effector populations within complex immune environments.

This CD7 Antibody is uniquely positioned for cytotoxic lymphocyte research, where detection of CD7 enables analysis of effector cell distribution, activation, and functional status. It supports studies investigating how cytotoxic lymphocytes respond to infection, tumor development, and immune challenges, providing insight into the mechanisms that drive immune-mediated cell killing.

In cytotoxic immune responses, CD7-positive cells participate in target cell elimination through pathways involving perforin and granzyme release, as well as through cytokine-mediated signaling that amplifies immune responses. The ability to detect CD7 allows researchers to study these processes at the cellular level and to examine how effector functions are regulated under different experimental conditions.

CD7 is often used in combination with markers such as CD8, CD56, and other cytotoxicity-associated proteins to define functional subsets of cytotoxic lymphocytes. This enables detailed analysis of immune cell heterogeneity, including differences in activation state, effector capacity, and regulatory interactions within the immune system.

The expression of CD7 on both T cells and NK cells highlights its role in bridging adaptive and innate immune responses, making it particularly valuable for studies examining coordinated immune defense mechanisms. This dual relevance supports investigations into how different immune compartments interact to achieve effective pathogen clearance and tumor control.

In addition to its role in normal immune function, cytotoxic lymphocyte activity is often altered in disease states such as cancer, chronic infection, and immune dysregulation. CD7 detection provides a means to study these changes and to investigate how effector cell populations are impacted under pathological conditions.

CD7 Antibody (clone CD7/7605) as a Cytotoxic Lymphocyte Marker Antibody provides a powerful and biologically meaningful tool for investigating effector immune cell biology, enabling detailed analysis of cytotoxic lymphocyte function, immune surveillance mechanisms, and host defense processes across a wide range of experimental contexts.

For an alternative recombinant monoclonal antibody targeting this T-cell surface marker, see our CD7 Antibody CD7/3868R, validated for western blot and immunohistochemistry.

Application Notes

Optimal dilution of the CD7 Antibody CD7/7605 / Cytotoxic Lymphocyte Marker Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the CD7 antibody.

Storage

Aliquot the CD7 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD7 cytotoxic lymphocyte antibody, CD7 effector cell marker antibody, CD7 NK T cell antibody, T-cell antigen CD7 antibody, CD7 immune effector antibody

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