

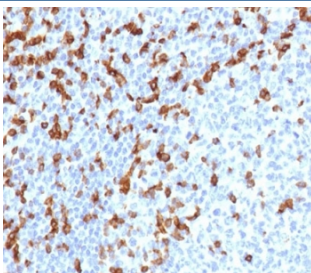
CD7 Antibody / T Cell Activation Marker Antibody [clone rCD7/6387] (V9149)

Catalog No.	Formulation	Size
V9149-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9149-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9149SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

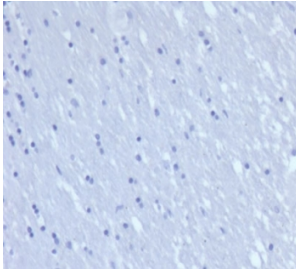
Recombinant **MOUSE MONOCLONAL**

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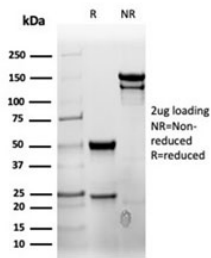
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rCD7/6387
Purity	Protein A/G affinity
UniProt	P09564
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This CD7 Antibody / T Cell Activation Marker Antibody is available for research use only.



CD7 Antibody for IHC. Immunohistochemistry analysis of CD7 / T-cell antigen CD7 in human tonsil tissue shows distinct HRP-DAB brown membranous staining of scattered lymphoid cells within interfollicular regions, consistent with CD7-positive T lymphocytes involved in immune activation, while surrounding areas display minimal background staining. Recombinant CD7 antibody clone rCD7/6387 was used following heat-induced epitope retrieval in pH 9 Tris-EDTA buffer, supporting its utility as a T cell activation marker in FFPE tissue sections.



CD7 Antibody Negative Control. Immunohistochemistry analysis of CD7 / T-cell antigen CD7 in human brain tissue shows absence of HRP-DAB brown staining with only hematoxylin counterstain visible, consistent with expected lack of CD7 expression in non-lymphoid tissue and supporting antibody specificity. Recombinant CD7 antibody clone rCD7/6387 was applied at 2 ug/ml following heat-induced epitope retrieval in pH 9 Tris-EDTA buffer, serving as a negative tissue control for T cell activation marker detection in FFPE sections.



SDS-PAGE analysis of purified, BSA-free recombinant CD7 antibody (clone rCD7/6387) as confirmation of integrity and purity.

Description

Cluster of Differentiation 7 (CD7) is a transmembrane glycoprotein (CD7) belonging to the immunoglobulin superfamily and is predominantly expressed on T lymphocytes and natural killer (NK) cells, where it localizes to the cell surface and participates in early immune signaling events. CD7 Antibody / T Cell Activation Marker Antibody is uniquely positioned for studying activation-dependent immune processes, enabling detection of CD7 in contexts where T cell stimulation, co-receptor engagement, and downstream signaling pathways are central to experimental outcomes.

CD7 antibody, also referred to as T-cell antigen CD7 antibody, plays a significant role in T cell activation biology. Upon engagement of the T cell receptor complex, CD7 participates in co-stimulatory signaling pathways that modulate intracellular signaling cascades, including kinase activation, calcium mobilization, and transcriptional responses. These pathways are critical for initiating T cell proliferation, cytokine production, and differentiation into effector subsets. As such, CD7 serves as a valuable marker for examining activation states and functional responsiveness of lymphocytes.

This CD7 Antibody is uniquely positioned for activation-focused research, where CD7 contributes to the regulation of immune signaling thresholds and the amplification of activation signals. It enables researchers to study how CD7 interacts with other co-stimulatory and signaling molecules such as CD3, CD28, and CD2, forming part of a coordinated network that governs T cell activation and immune response magnitude.

In experimental systems, CD7 expression is maintained across resting and activated T cells, but its functional involvement becomes particularly important during activation events. This allows CD7 to serve as a stable yet functionally relevant marker that can be used to track activated lymphocyte populations while also providing insight into signaling dynamics. The ability to detect CD7 in conjunction with activation markers enhances the resolution of immune profiling studies.

Beyond T cells, CD7 expression on NK cells links it to cytotoxic immune responses, where activation signals regulate target cell recognition and elimination. This further expands the utility of CD7 as a marker for studying activation across both adaptive and innate immune compartments.

Importantly, CD7-mediated signaling has been implicated in modulating immune responses under both physiological and pathological conditions, including infection, inflammation, and immune dysregulation. Its role in shaping activation responses makes it a valuable target for studies investigating immune modulation and therapeutic intervention strategies.

Overall, CD7 Antibody as a T Cell Activation Marker Antibody provides a powerful tool for investigating immune signaling pathways, enabling detailed analysis of T cell activation, co-stimulation, and functional immune responses across a wide

range of experimental models.

This antibody is part of a broader [CD7 antibody](#) collection designed to support T cell biology, immune profiling, and hematologic cancer research.

Application Notes

Optimal dilution of the CD7 Antibody / T Cell Activation Marker Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 72-175 was used as the immunogen for the recombinant CD7 antibody.

Storage

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

Alternate Names

CD7 activation marker antibody, CD7 T cell activation antibody, T-cell antigen CD7 antibody, CD7 immune signaling antibody, CD7 co-stimulation antibody