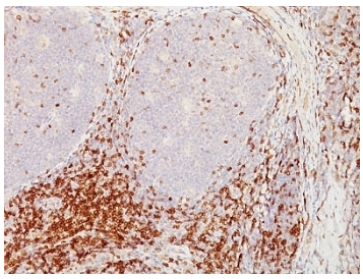
CD5 Antibody CD5/54F6 / T Cell Marker Antibody [clone CD5/54/F6] (V3120)

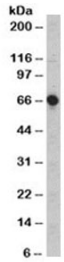
Catalog No.	Formulation	Size
V3120-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3120-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3120SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3120IHC-7ML	Prediluted 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

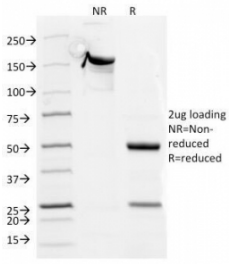
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CD5/54/F6
Purity	Protein G affinity chromatography
UniProt	P06127
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD5 Antibody CD5/54F6 / T Cell Marker Antibody is available for research use only.



CD5 Antibody CD5/54F6. Immunohistochemistry analysis of CD5 antibody staining in formalin-fixed, paraffin-embedded human tonsil tissue using a T cell marker antibody. Clone CD5/54F6 shows strong membranous staining of T lymphocytes within interfollicular regions, with dense labeling of T cell zones surrounding germinal centers, while follicular B cell areas remain largely negative. The staining pattern highlights normal tonsillar architecture and clearly delineates T cell-rich compartments, consistent with the established role of CD5 as a marker of mature T lymphocytes in lymphoid tissue.



CD5 Antibody CD5/54F6. Western blot analysis of CD5 antibody in human MOLT-4 cell lysate using a T cell marker antibody. A band is detected at approximately 55-67 kDa, consistent with the predicted molecular weight of CD5, with variation reflecting known glycosylation of this cell surface glycoprotein. The strong signal observed in this T cell-derived lysate aligns with the established enrichment of CD5 in T lymphocytes.



SDS-PAGE Analysis of Purified, BSA-Free CD5 Antibody (clone CD5/54/F6). Confirmation of Integrity and Purity of the Antibody.

Description

CD5 (CD5) is a type I transmembrane glycoprotein belonging to the scavenger receptor cysteine-rich (SRCR) superfamily, localized to the plasma membrane of T lymphocytes and a subset of B cells. CD5 Antibody CD5/54F6 - T Cell Marker Antibody is widely used to detect CD5 as a defining marker of T cell lineage across a range of experimental systems. CD5 antibody, also known as T cell surface glycoprotein CD5 antibody or LEU1 antibody, is a cornerstone reagent for identifying T lymphocytes and distinguishing CD5-positive immune cell populations within complex biological samples.

CD5 is highly expressed on thymocytes during development and remains consistently present on mature peripheral T cells, making it one of the most reliable markers for T cell identification. Its expression extends to a subset of B cells, particularly those associated with innate-like immune responses and specific disease states. Clone CD5/54F6 antibody enables robust detection of CD5 across these populations, supporting clear identification of T cell-rich environments and enabling detailed characterization of lymphoid tissues, immune infiltration patterns, and cellular composition.

Functionally, CD5 acts as a critical regulator of antigen receptor signaling, modulating T cell receptor (TCR) activation thresholds and maintaining immune homeostasis. By attenuating signaling intensity, CD5 contributes to the prevention of excessive immune activation and supports tolerance mechanisms. Because CD5 expression and signaling are closely linked to T cell activation status, CD5 antibody clone CD5/54F6 is frequently used in studies investigating immune signaling dynamics, T cell differentiation, and functional responses under physiological and disease conditions.

In addition to its role in normal immune function, CD5 is an important marker in the study of hematologic malignancies. Its expression on certain B cell populations is a defining feature of diseases such as chronic lymphocytic leukemia (CLL) and mantle cell lymphoma. CD5 antibody clone CD5/54F6 supports detection of these disease-associated populations and is commonly used in research aimed at understanding lymphoid neoplasms, immune dysregulation, and tumor microenvironment interactions. The ability to detect CD5 across both T cell and specific B cell subsets provides valuable context for interpreting immune-related findings.

This mouse monoclonal antibody clone CD5/54F6 has been referenced in peer-reviewed publications, supporting its use in established experimental workflows and providing confidence in its reproducibility. Its consistent performance in detecting CD5 across lymphocyte populations makes it a dependable tool for studies of immune cell biology, lineage identification, and lymphoid tissue organization. Because CD5 is a stable and widely expressed T cell marker, this clone is particularly well suited for experiments requiring clear and reliable identification of T lymphocytes.

Due to its strong association with T cell identity and immune system regulation, CD5 antibody clone CD5/54F6 is widely

used in studies of immune cell distribution, activation states, and disease-associated changes in lymphocyte populations. Its ability to provide consistent detection across diverse experimental contexts makes it a valuable reagent for both basic immunology research and translational studies focused on immune-related diseases.

For additional CD5 research, explore our CD5 Antibody CD5/2416, a mouse monoclonal antibody with HuProt protein microarray specificity validation and supporting Western blot, IHC, and flow cytometry data.

Application Notes

The optimal dilution of the CD5 Antibody CD5/54F6 / T Cell Marker Antibody for each application should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. 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

A portion of amino acids 450-495 from the human protein was used as the immunogen for this CD5 antibody.

Storage

Store the CD5 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD5 clone CD5/54F6 antibody, CD5 54F6 antibody, CD5 monoclonal antibody clone 54F6, CD5 T cell marker antibody, CD5 lymphocyte marker antibody

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