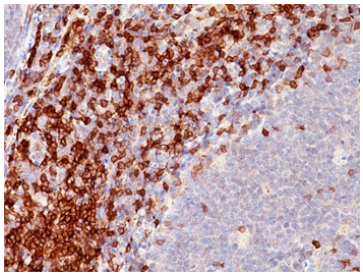
CD5 Antibody / Immune Cell Communication Marker Antibody [clone C5/473] (V2035)

Catalog No.	Formulation	Size
V2035-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2035-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2035SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2035IHC-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

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C5/473
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	921
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This CD5 Antibody / Immune Cell Communication Marker Antibody is available for research use only.



CD5 Antibody for IHC. Immunohistochemistry analysis of CD5 antibody staining in human tonsil tissue using an immune cell communication marker antibody, clone C5/473. Strong membranous staining is observed in interfollicular T lymphocytes with dense labeling of T cell zones adjacent to germinal centers, while follicular B cell regions remain largely negative. The staining pattern highlights lymphoid architecture and reflects the role of CD5 in mediating immune cell interactions and signaling at sites of lymphocyte communication.

Description

CD5 (CD5 molecule) is a type I transmembrane glycoprotein of the scavenger receptor cysteine-rich (SRCR) superfamily, localized to the plasma membrane of T lymphocytes and a subset of B cells where it participates in intercellular signaling processes. CD5 Antibody / Immune Cell Communication Marker Antibody is used to detect CD5 in the context of immune cell interaction, where it contributes to communication between lymphocytes and their surrounding cellular environment. CD5 antibody, also known as T cell surface glycoprotein CD5 antibody or LEU1 antibody, is widely used to study immune signaling networks, cellular interaction pathways, and lymphocyte coordination.

Effective immune responses depend on coordinated communication between immune cells, including antigen-presenting cells, T lymphocytes, and B cells. CD5 is positioned at the cell surface where it participates in receptor-mediated signaling events that influence how immune cells interpret and respond to external cues. By modulating signaling strength and integrating receptor inputs, CD5 contributes to the coordination of immune cell interactions, allowing lymphocytes to respond appropriately within complex tissue environments.

CD5 plays a role at the immunological synapse, the specialized contact interface formed between T cells and antigen-presenting cells. Within this structure, CD5 helps regulate signaling intensity during cell-cell contact, contributing to the fine-tuning of activation signals exchanged between interacting immune cells. CD5 antibody enables detection of this molecule in studies examining immune synapse formation, signal propagation, and cellular communication dynamics.

Expression of CD5 across T lymphocytes and select B cell populations allows it to participate in multiple communication pathways within the immune system. Detection of CD5 across these populations supports studies investigating how immune cells coordinate responses, exchange signals, and maintain functional balance across different tissue compartments. CD5 antibody is therefore particularly useful in studies of lymphoid tissue organization and immune network behavior.

In pathological settings, disruptions in immune cell communication contribute to disease processes including chronic inflammation, immune deficiency, and tumor progression. Altered CD5 signaling may impact how immune cells interact within these environments, affecting overall immune coordination. CD5 antibody supports investigation of these processes by enabling detection of key molecules involved in cellular interaction and signaling exchange.

CD5 is also relevant in studies of immune cell clustering, migration, and tissue-specific localization, where communication between immune cells shapes functional outcomes. Detection of CD5 provides insight into how lymphocytes organize within tissues and respond to microenvironmental cues.

This antibody is suitable for detecting CD5 in research applications focused on immune cell communication and signaling integration. Its ability to identify CD5-positive lymphocytes supports studies of intercellular signaling, immune coordination, and functional immune network behavior across both normal and disease states.

Because CD5 is involved in immune cell communication, CD5 antibody is widely used in studies of lymphocyte interaction, signaling networks, and immune system coordination.

A full range of CD5 antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD5 Antibody collection page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD5 Antibody / Immune Cell Communication Marker Antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA 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 antibody.

Storage

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

Alternate Names

CD5 cell communication antibody, CD5 immune interaction antibody, CD5 lymphocyte interaction marker antibody, CD5 cell signaling interface antibody, CD5 immune contact marker antibody

References (2)