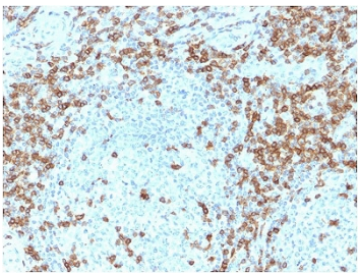
CD5 Antibody CD5/2418 / HuProt Validated Specificity Antibody [clone CD5/2418] (V7521)

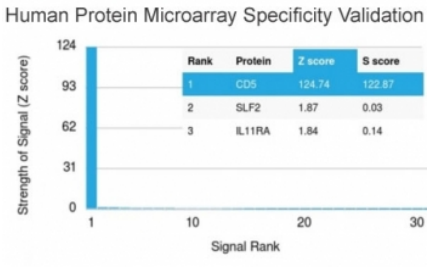
Catalog No.	Formulation	Size
V7521-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7521-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7521SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7521IHC-7ML	Prediluted 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

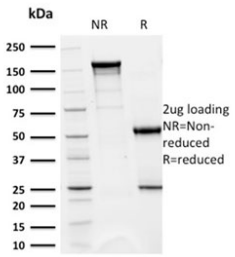
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	CD5/2418
Purity	Protein G affinity chromatography
UniProt	P06127
Localization	Cell surface
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD5 Antibody CD5/2418 / HuProt Validated Specificity Antibody is available for research use only.



CD5 Antibody CD5/2418. Immunohistochemistry analysis of CD5 antibody staining in FFPE human tonsil tissue using a HuProt validated specificity antibody. Strong membranous staining is observed in T lymphocytes within interfollicular regions, with dense labeling surrounding germinal centers while follicular B cell areas remain largely negative. The staining pattern highlights normal tonsillar architecture and supports highly selective detection of CD5-positive T cell populations, consistent with proteome-scale HuProt validation. Heat-induced epitope retrieval was performed in 10 mM citrate buffer, pH 6, for 10-20 minutes followed by cooling at room temperature prior to antibody incubation.



CD5 Antibody Clone CD5/2418. Protein microarray specificity analysis using a HuProt microarray containing more than 19,000 full-length human proteins demonstrates highly selective binding of the CD5/2419 monoclonal antibody to CD5. CD5 is identified as the top-ranked target with strong signal intensity (Z-score ~124.74) and clear separation from the next highest signals (S-score ~122.87), while all other proteins show minimal background binding. The Z-score reflects signal strength relative to the array mean, and the S-score represents the separation between the intended target and the next ranked protein, indicating relative specificity. These results support the high specificity of the CD5/2418 antibody for its intended target in proteome-scale screening.



SDS-PAGE analysis of purified, BSA-free CD5 antibody (clone CD5/2418) as confirmation of integrity and purity.

Description

CD5 (CD5) is a transmembrane glycoprotein of the scavenger receptor cysteine-rich (SRCR) superfamily, expressed on T lymphocytes and a subset of B cells. CD5 Antibody CD5/2418 / HuProt Validated Specificity Antibody is developed for high-confidence detection of CD5, supported by proteome-scale HuProt validation, providing a rigorous assessment of antibody specificity across thousands of full-length human proteins. CD5 antibody, also known as T cell surface glycoprotein CD5 antibody or LEU1 antibody, is widely used to identify lymphocyte populations and investigate immune system function.

CD5 is consistently expressed on mature T cells and plays a critical role in regulating antigen receptor signaling, contributing to immune tolerance and proper immune system function. Its expression on select B cell subsets further enhances its relevance in studies of lymphocyte biology and disease. CD5 antibody is therefore commonly used in research focused on immune cell identity, signaling pathways, and lymphoid tissue structure across both normal and pathological conditions.

HuProt validation represents a high-stringency approach to antibody specificity assessment, involving screening against a comprehensive collection of full-length human proteins to evaluate potential off-target interactions. CD5 antibody clone CD5/2418 has been characterized using this proteome-scale platform, supporting its ability to selectively recognize CD5 with minimal cross-reactivity. This level of validation provides strong assurance of specificity, particularly in complex biological systems where non-specific binding can lead to misleading results.

The proteome-wide validation profile of CD5 antibody clone CD5/2419 makes it especially valuable for advanced research applications, including biomarker discovery, systems biology studies, and large-scale protein analysis. By demonstrating selective binding across a broad protein landscape, this antibody supports high-confidence data

interpretation and enhances reproducibility in demanding experimental settings.

This mouse monoclonal antibody clone CD5/2418 has been referenced in peer-reviewed publications, supporting its use in established research workflows. Its consistent detection of CD5, combined with its HuProt-validated specificity, makes it a reliable tool for studies requiring stringent validation standards and high specificity performance.

Because CD5 is a key marker of lymphocyte identity and immune regulation, CD5 antibody clone CD5/2418 is widely used in advanced research settings where high-confidence, validation-supported detection is essential for accurate analysis of immune cell populations and protein expression.

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 CD5/2418 / HuProt Validated Specificity Antibody for each application should be determined by the researcher.

1. 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 269-366 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 CD5/2418 antibody, CD5 2419 antibody, CD5 HuProt validated antibody, CD5 proteome specificity antibody, CD5 monoclonal antibody 2418

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