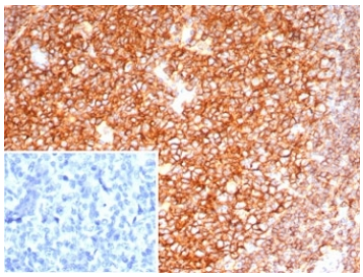
CD19 Antibody Protein Microarray Validated [clone CD19/7665] (V4404)

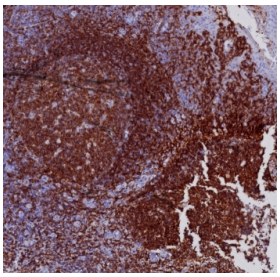
Catalog No.	Formulation	Size
V4404-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4404-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4404SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

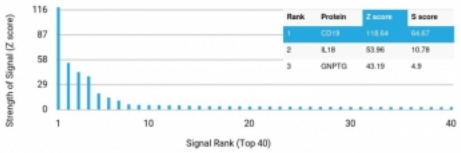
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CD19/7665
Purity	Protein A/G affinity
UniProt	P15391
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This CD19 antibody is available for research use only.



Immunohistochemistry analysis of CD19 Antibody Protein Microarray Validated in human tonsil tissue. FFPE human tonsil shows strong membranous HRP-DAB brown staining in B lymphocytes within lymphoid follicles, consistent with CD19 (Cluster of Differentiation 19) expression on mature B cells. Antigen retrieval was performed by boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 20 minutes followed by cooling prior to incubation with CD19 antibody (clone CD19/7665).



IHC staining of FFPE human tonsil tissue with CD19 antibody (clone CD19/7665). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD19 antibody (clone CD19/7665). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.

Description

CD19 antibody recognizes CD19, a B cell-specific type I transmembrane glycoprotein that functions as a central coreceptor in B cell receptor signaling. CD19 Antibody Protein Microarray Validated is optimized for high-throughput protein array applications and precise detection of CD19 in multiplexed experimental systems. CD19 is a member of the immunoglobulin superfamily and is expressed from the early pro-B cell stage through mature peripheral B lymphocytes, where it localizes to the plasma membrane. By forming a signaling complex with CD21, CD81, and CD225, CD19 amplifies antigen receptor signaling and lowers the threshold for B cell activation.

The CD19 gene is located on chromosome 16p11.2 and encodes a protein containing two extracellular immunoglobulin-like domains, a single transmembrane segment, and a cytoplasmic tail enriched with tyrosine residues that become phosphorylated following activation. These phosphorylation events recruit signaling molecules such as PI3K and other adaptor proteins, promoting downstream pathways that regulate B cell proliferation, differentiation, and survival. CD19 Antibody Protein Microarray Validated supports investigations into normal B cell development and dysregulated signaling associated with immune disorders and malignancy.

In normal tissues, CD19 expression is restricted to B lineage cells within bone marrow, lymph node, tonsil, and spleen. Terminally differentiated plasma cells typically exhibit reduced or absent CD19 expression, reflecting progression through late stages of B cell maturation. Because of its lineage specificity and consistent surface expression, CD19 serves as a reliable pan-B cell marker in immunologic research and translational studies.

Aberrant CD19 expression is a defining feature of most B cell malignancies, including B cell acute lymphoblastic leukemia, chronic lymphocytic leukemia, and multiple forms of non-Hodgkin lymphoma. CD19 is also a major therapeutic target in immunotherapy strategies, including chimeric antigen receptor T cell approaches. Accurate detection of CD19 is therefore essential for research into tumor biology, immune targeting, and therapeutic development.

Clone CD19/7665 is a recombinant rabbit monoclonal antibody engineered for high specificity and reproducible performance. Protein microarray validation supports its utility in multiplexed screening platforms requiring consistent binding characteristics and low cross-reactivity. CD19 Antibody Protein Microarray Validated clone CD19/7665 provides reliable detection of CD19 in research applications requiring precision, scalability, and reproducibility.

Application Notes

Optimal dilution of the CD19 antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human CD19 protein (around aa1-300) was used as the immunogen for the CD19 antibody.

Storage

Aliquot the CD19 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.