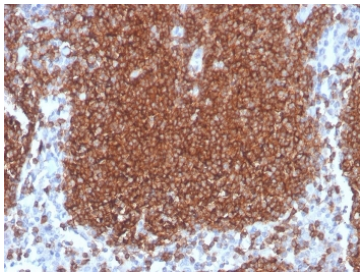
CD19 Antibody Recombinant Mouse MAb [clone rCD19/4591] (V8656)

Catalog No.	Formulation	Size
V8656-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8656-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8656SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

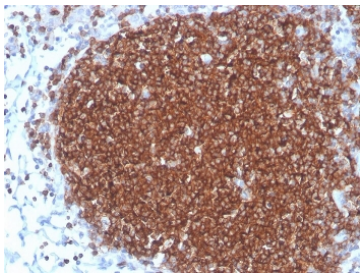
Recombinant MOUSE MONOCLONAL

Bulk quote request

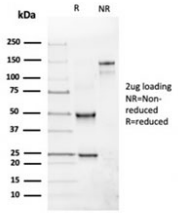
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rCD19/4591
Purity	Protein G affinity chromatography
UniProt	P15391
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This CD19 antibody is available for research use only.



Immunohistochemistry analysis of CD19 Antibody Recombinant Mouse MAb (Clone rCD19/4591) in human lymph node tissue. FFPE human lymph node demonstrates strong membranous HRP-DAB brown staining in B lymphocytes within germinal centers and follicular regions, consistent with CD19 (Cluster of Differentiation 19) expression on mature B cells, while surrounding T cell-rich areas show minimal staining. 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 recombinant CD19 antibody.



IHC staining of FFPE human lymph node with CD19 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free CD19 antibody as confirmation of integrity and purity.

Description

CD19 antibody recognizes CD19, a B cell-specific type I transmembrane glycoprotein that functions as a key coreceptor in B cell receptor signaling. CD19 Antibody Recombinant Mouse MAb (Clone rCD19/4591) is developed for precise detection of CD19 in research applications requiring specificity and reproducibility. CD19 is a member of the immunoglobulin superfamily and is expressed from early pro-B cell stages through mature peripheral B lymphocytes, where it localizes to the plasma membrane. By forming a signaling complex with CD21 and CD81, CD19 amplifies antigen receptor-mediated signaling and lowers the activation threshold of B cells.

The CD19 gene is located on chromosome 16p11.2 and encodes a protein containing two extracellular immunoglobulin-like domains, a single transmembrane region, and a cytoplasmic tail enriched in tyrosine residues that become phosphorylated upon activation. These phosphorylation events recruit signaling molecules such as PI3K and other adaptor proteins, driving pathways that regulate B cell proliferation, differentiation, and survival. CD19 Antibody Recombinant Mouse MAb (Clone rCD19/4591) supports investigations into normal B cell development as well as dysregulated signaling observed in immune disorders and malignancy.

In normal tissues, CD19 expression is restricted to B lineage cells within bone marrow, lymph node, tonsil, and spleen. Plasma cells typically show reduced or absent CD19 expression, reflecting terminal differentiation. Because of its lineage specificity and stable membrane expression, CD19 serves as a reliable pan-B cell marker in immunologic and translational research.

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

Clone rCD19/4591 is a recombinant mouse monoclonal antibody engineered for consistent sequence identity and lot-to-lot reproducibility. Recombinant production supports stable performance across experimental batches. CD19 Antibody Recombinant Mouse MAb (Clone rCD19/4591) provides reliable detection of CD19 with strong membranous staining in CD19-positive B cells and minimal background in non-B cell populations.

Application Notes

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

Immunogen

A portion of amino acids 456-556 from the human protein was used as the immunogen for the recombinant CD19 antibody.

Storage

Store the CD19 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).