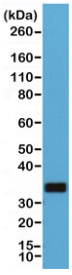
Recombinant CD20 Antibody / Cytoplasmic domain [clone RM272] (R20289)

Catalog No.	Formulation	Size
R20289-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

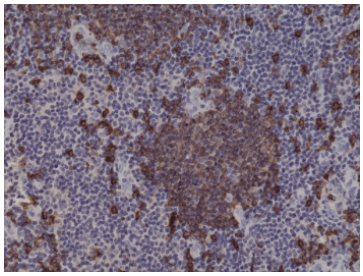
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM272
Purity	Protein A purified from animal origin-free supernatant
UniProt	P11836
Gene ID	931
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1:500-1:1000 (1) Western Blot : 1:1000-1:2000
Limitations	This recombinant CD20 antibody is available for research use only.



Western blot of human Raji cell lysate using recombinant CD20 antibody at 1:1000. Predicted molecular weight ~33 kDa.



IHC testing of FFPE human tonsil tissue with recombinant CD20 antibody at 1:1000.

Description

The Recombinant CD20 antibody is a recombinant reagent engineered to detect CD20, a non-glycosylated phosphoprotein expressed on the surface of B lymphocytes. CD20, encoded by the MS4A1 gene, is a transmembrane protein with four membrane-spanning domains and functions as a regulator of B cell activation and proliferation. It appears during the pre-B cell stage, persists through mature B cells, and is lost upon terminal differentiation into plasma cells. Because of its restricted expression pattern, CD20 serves as both a lineage marker for B cells and a therapeutic target in autoimmune disease and B cell malignancies. The Recombinant CD20 antibody provides highly specific and reproducible detection of this important protein across research and clinical applications.

CD20 is thought to act as a calcium channel or regulator of calcium signaling, contributing to B cell receptor-mediated activation. While its precise physiological role is not fully defined, its consistent expression on mature B cells has made it a key biomarker for hematological studies. In oncology, CD20 is central to the diagnosis and treatment of non-Hodgkin lymphomas, chronic lymphocytic leukemia, and related disorders. Monoclonal antibodies targeting CD20, such as rituximab and obinutuzumab, have transformed clinical management of these diseases by depleting malignant B cells. The Recombinant CD20 antibody provides a research-grade tool for monitoring CD20 expression in cell lines, tissue sections, and primary samples.

In immunohistochemistry, the Recombinant CD20 antibody produces strong membranous staining in B cellÃ¢Â€Â“rich areas of lymphoid tissues, aiding in the identification of B cell populations and lymphoid neoplasms. In immunofluorescence, it reveals cell surface localization, consistent with its role as a membrane-bound protein. In western blotting, the antibody detects CD20 in B cell lysates, supporting studies of protein expression and regulation. Recombinant production ensures batch-to-batch consistency, reducing variability that can affect hybridoma-derived antibodies.

The Recombinant CD20 antibody is widely used in immunology, oncology, and translational research. In basic immunology, it provides a tool to track B cell development and differentiation. In oncology, it supports studies of CD20 expression patterns in lymphoma subtypes and therapeutic response. It is also applied in preclinical research to evaluate novel CD20-targeted therapies and to understand mechanisms of resistance to antibody-based treatments. Synonym phrases such as recombinant MS4A1 antibody, recombinant B lymphocyte antigen antibody, and recombinant membrane-spanning 4A1 antibody expand accessibility for diverse users.

By delivering validated and reproducible detection, the Recombinant CD20 antibody supports accurate assessment of B cell biology and disease. NSJ Bioreagents validates this reagent under rigorous quality standards, ensuring reliable performance in western blotting, immunofluorescence, and immunohistochemistry. With its specificity for CD20, the Recombinant CD20 antibody is an indispensable tool for advancing research in immunology, oncology, and targeted therapy development.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant CD20 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. A pH6 Citrate buffer or pH9 Tris/EDTA buffer HIER step is recommended for testing of FFPE tissue sections.

Immunogen

A peptide corresponding to the C-terminus of human CD20 was used as the immunogen for this recombinant CD20 antibody.

Storage

Store the recombinant CD20 antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).