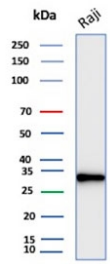
CD20 Antibody Recombinant Mouse MAb [clone rMS4A1/8044] (V4166)

Catalog No.	Formulation	Size
V4166-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4166-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4166SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

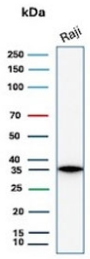
Recombinant MOUSE MONOCLONAL

Bulk quote request

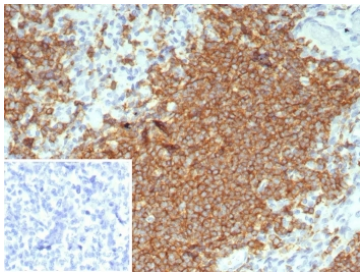
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rMS4A1/8044
Purity	Protein A/G affinity
UniProt	P11836
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This CD20 antibody is available for research use only.



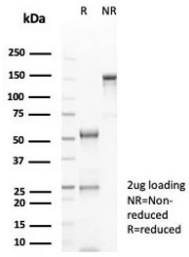
Western blot analysis of CD20 Antibody Recombinant Mouse MAb in human Raji cell lysate. A distinct immunoreactive band is observed at approximately 33 kDa, consistent with the predicted molecular weight of CD20/MS4A1. The single band pattern supports specific detection of CD20 in this B-cell derived line.



Western blot testing of human Raji cell lysate with CD20 antibody. Predicted molecular weight ~33 kDa.



IHC staining of FFPE human tonsil tissue with CD20 antibody (clone rMS4A1/8044). Inset: PBS used in place of primary Ab (secondary Ab negative control). 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 CD20 antibody (clone rMS4A1/8044) as confirmation of integrity and purity.

Description

CD20 antibody recognizes CD20, also known as Membrane spanning 4-domains subfamily A member 1, a B-cell specific transmembrane phosphoprotein encoded by the MS4A1 gene. CD20 is localized to the plasma membrane of B lymphocytes, where it plays a role in regulating B-cell activation, proliferation, and calcium signaling. CD20 Antibody Recombinant Mouse MAb is developed to support research in B-cell immunology, lymphoma biology, and therapeutic antibody development.

The MS4A1 gene is located on chromosome 11q12.2 and encodes a protein with four transmembrane domains and short cytoplasmic N- and C-terminal regions. CD20 expression begins at the late pre-B-cell stage and persists through mature B cells but is absent on hematopoietic stem cells and terminally differentiated plasma cells. This restricted expression pattern makes CD20 a widely used marker for identifying B-cell populations in lymphoid tissues such as tonsil, spleen, and lymph node.

Functionally, CD20 is associated with the B-cell receptor complex and contributes to calcium influx following antigen engagement. Although CD20 does not have a clearly defined soluble ligand, it participates in membrane microdomains that regulate signal transduction and cell cycle progression. Dysregulated CD20 expression is observed in B-cell non-Hodgkin lymphoma, chronic lymphocytic leukemia, and other lymphoproliferative disorders. CD20 Antibody Recombinant Mouse MAb enables evaluation of CD20 distribution and density in both normal and malignant B-cell populations.

CD20 is also a major therapeutic target in oncology and autoimmune disease. Anti-CD20 monoclonal antibodies are used clinically to induce B-cell depletion through complement activation, antibody-dependent cellular cytotoxicity, and apoptotic mechanisms. Ongoing research continues to investigate CD20 modulation, resistance mechanisms, and expression heterogeneity in treated patients. Clone rMS4A1/8044 is engineered as a recombinant mouse monoclonal antibody to provide consistent specificity and reproducibility in CD20 detection.

By targeting a clinically significant B-cell surface antigen, CD20 Antibody Recombinant Mouse MAb supports studies in

lymphoma classification, immune regulation, and translational research focused on CD20-directed therapies.

Application Notes

Optimal dilution of the CD20 antibody should be determined by the researcher.

Immunogen

A recombinant partial protein (within amino acids 200-297) from the human protein was used as the immunogen for the CD20 antibody.

Storage

Aliquot the CD20 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Copyright © NSJ Bioreagents. All rights reserved.