

CD20 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1136a**Specification**

CD20 Antibody - Product Information

Application	IHC, IF, WB
Primary Accession	P11836
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG

Description

CD20 (MS4A1, membrane-spanning 4-domains, subfamily A, member 1) is a member of the membrane-spanning 4A gene family. Members of this nascent protein family are characterized by common structural features and similar intron/exon splice boundaries and display unique expression patterns among hematopoietic cells and nonlymphoid tissues. The CD20 antigen is present on human pre B lymphocytes and on B lymphocytes at all stages of maturation, except on plasma cells. Low level expression of the CD20 antigen has been detected on normal T lymphocytes. The CD20 molecule is involved in regulation of B cell differentiation, presumably via its reported function as a Ca⁺⁺ channel subunit. And it is known to accelerate the G0 to G1 progression induced by IGF-1.

Immunogen

Synthetic peptide corresponding to aa (EPANPSEKNSPSTQY) of human CD20, conjugated to KLH.

Formulation

Ascitic fluid containing 0.03% sodium azide.

CD20 Antibody - Additional Information

Gene ID 931

Other Names

B-lymphocyte antigen CD20, B-lymphocyte surface antigen B1, Bp35, Leukocyte surface antigen Leu-16, Membrane-spanning 4-domains subfamily A member 1, CD20, MS4A1, CD20

Dilution

IHC~~1/200 - 1/1000

IF~~1/200 - 1/1000

WB~~1:500~~2000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD20 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD20 Antibody - Protein Information

Name MS4A1

Synonyms CD20

Function

B-lymphocyte-specific membrane protein that plays a role in the regulation of cellular calcium influx necessary for the development, differentiation, and activation of B-lymphocytes (PubMed:12920111, PubMed:3925015, PubMed:7684739). Functions as a store-operated calcium (SOC) channel component promoting calcium influx after activation by the B-cell receptor/BCR (PubMed:12920111, PubMed:18474602, PubMed:7684739).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell membrane; Lipid-anchor. Note=Constitutively associated with membrane rafts.

Tissue Location

Expressed on B-cells.

CD20 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD20 Antibody - Images

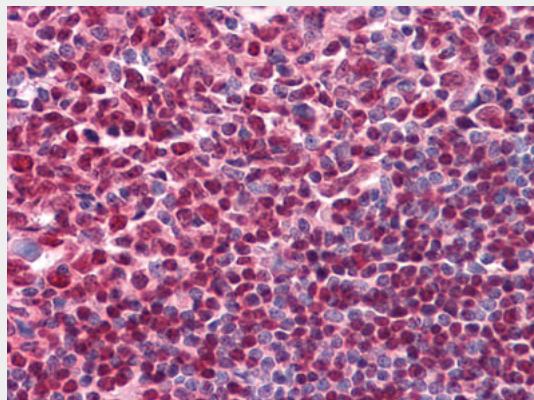


Figure 1: Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using CD20 mouse mAb.

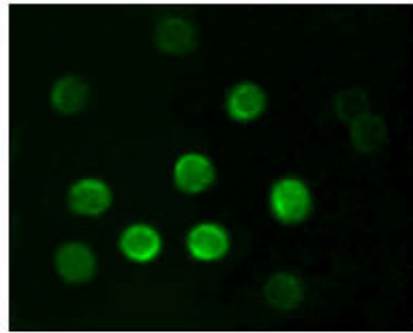


Figure 2: Immunofluorescence analysis of B lymphocytes using CD20 mouse mAb.

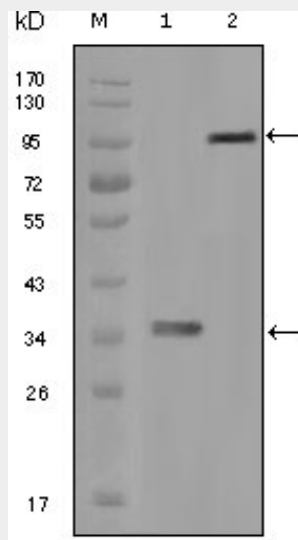


Figure 1: Western blot analysis using HCK mouse mAb against truncated HCK recombinant protein (1) and full-length HCK-GFP transfected CHO-K1 cell lysate (2).

CD20 Antibody - References

1. Byar K. Semin Oncol Nurs. 2004, Feb, 20 (1 Suppl 1):20-5. Review.
2. Reiners KS. Hansen HP. Krüssmann A. et al. Immunology. 2004, Jun, 112(2):228-36.