

# CD20 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1136a

## **Product Information**

Application Primary Accession Reactivity Host Clonality Clone Names Isotype Calculated MW Description	IHC, ICC, E P11836 Human Mouse Monoclonal 3E9D3C1G3 IgG 33077 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.

### **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 ICC~~N/A E~~N/A
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.

#### **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: <u>12920111</u> , PubMed: <u>3925015</u> , PubMed: <u>7684739</u> ). Functions as a store-operated calcium (SOC) channel component promoting calcium influx after activation by the B-cell receptor/BCR (PubMed: <u>12920111</u> , PubMed: <u>18474602</u> , PubMed: <u>7684739</u> ).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell membrane; Lipid-anchor. Note=Constitutively associated with membrane rafts.
Tissue Location	Expressed on B-cells.

#### 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.

#### Images

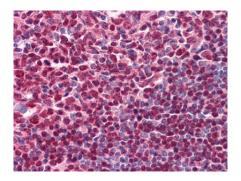


Figure 1: Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using CD20 mouse mAb.

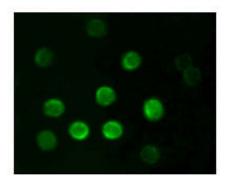
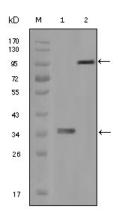


Figure 2: Immunofluorescence analysis of B lymphocytes using CD20 mouse mAb.

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).



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