

Anti-CD20 / MS4A1 (B-Cell Marker) Antibody Recombinant Mouse Monoclonal Antibody Catalog # AH13608

## Specification

# Anti-CD20 / MS4A1 (B-Cell Marker) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC-P, IF, FC <u>P11836</u> <u>712553</u> Human Mouse Monoclonal Mouse / IgG2a, kappa 33077

### Anti-CD20 / MS4A1 (B-Cell Marker) Antibody - Additional Information

Gene ID 931

#### **Other Names**

APY; ATOPY; B-lymphocyte antigen CD20; B-lymphocyte cell-surface antigen B1; Bp35; Fc epsilon receptor I beta chain; Fc Fragment of IgE high affinity I receptor for beta polypeptide; FCER1B; High affinity immunoglobulin epsilon receptor subunit beta; IgE Fc receptor subunit beta; IGEL; IGER; IGHER; LEU16; Leukocyte surface antigen Leu-16; Ly44; Membrane spanning 4 domains subfamily A member 2; Membrane-spanning 4-domains subfamily A member 1 (MS4A1)

### Application Note

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

Format

200ug/ml of recombinant MAb purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

#### Precautions

Anti-CD20 / MS4A1 (B-Cell Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Anti-CD20 / MS4A1 (B-Cell Marker) 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:<a href="http://www.uniprot.org/citations/12920111" target="\_blank">12920111</a>, PubMed:<a href="http://www.uniprot.org/citations/3925015" target="\_blank">3925015</a>, PubMed:<a href="http://www.uniprot.org/citations/7684739" target="\_blank">7684739</a>). Functions as a store-operated calcium (SOC) channel component promoting calcium influx after activation by the B-cell receptor/BCR (PubMed:<a href="http://www.uniprot.org/citations/12920111" target="\_blank">12920111" target="\_blank">12920111" target="\_blank">3925015</a>, PubMed:<a href="http://www.uniprot.org/citations/7684739" target="\_blank">3925015</a>, PubMed:<a href="http://www.uniprot.org/citations/7684739" target="\_blank">1292011</a>, PubMed:<a href="http://www.uniprot.org/citations/7684739" target="\_blank">7684739</a>).

### **Cellular Location**

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

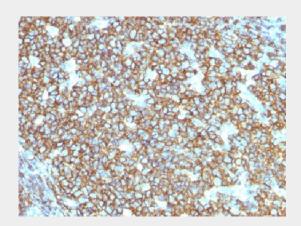
**Tissue Location** Expressed on B-cells.

# Anti-CD20 / MS4A1 (B-Cell Marker) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CD20 / MS4A1 (B-Cell Marker) Antibody - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD20 Recombinant Mouse Monoclonal Antibody (rIGEL/773).

## Anti-CD20 / MS4A1 (B-Cell Marker) Antibody - Background

Recognizes a protein of 30-33kDa, which is identified as CD20. It is a non-Ig differentiation antigen of B-cells and its expression is restricted to normal and neoplastic B-cells, being absent from all other leukocytes and tissues. CD20 is expressed by pre B-cells and persists during all stages of B-cell maturation but is lost upon terminal differentiation into plasma cells. This MAb can be used



for immunophenotyping of leukemia and malignant cells, B lymphocyte detection in peripheral blood and B cell localization in tissues. It reacts with the majority of B-cells present in peripheral blood and lymphoid tissues and their derived lymphomas. In lymphoid tissue, germinal center blasts and B-immunoblasts are particularly reactive. It is a reliable antibody for ascribing a B-cell phenotype in known lymphoid tissues. Rarely, CD20-positive T-cell lymphomas have been reported. Reactivity has also been noted with Reed-Sternberg cells in cases of Hodgkin s disease, particularly of lymphocyte predominant type.