

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

Recombinant Mouse Monoclonal Antibody Catalog # AH13608

#### **Product Information**

ApplicationIHC-P, IF, FCPrimary AccessionP11836Other Accession712553ReactivityHumanHostMouseClonalityMonoclonal

**Isotype** Mouse / IgG2a, kappa

Clone Names rIGEL/773
Calculated MW 33077

#### **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** Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml);

,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining

of formalin-fixed tissues requires boiling tissue sections in 10mM citrate

buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20

minutes), Optimal dilution for a specific application should be determined.

**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.

#### **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.

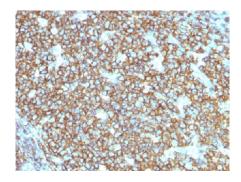
Note=Constitutively associated with membrane rafts.

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

## **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.

### **Images**



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.