

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

Recombinant Rabbit Monoclonal Antibody Catalog # AH13610

## **Product Information**

Application	IHC-P, IF, FC
Primary Accession	<u>P11836</u>
Other Accession	<u>712553</u>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit / IgG, kappa
Clone Names	IGEL/1497R
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 Ab purified by Protein A Column. 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 Rabbit Monoclonal Antibody (IGEL/1497R)

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