

# CD20 / MS4A1 (B-Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM618 ] Catalog # AH12665

## **Product Information**

Application Primary Accession	IHC, IF, FC <u>P11836</u>
Other Accession	<u>931, 712553</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Clone Names	SPM618
Calculated MW	33077

#### **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
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD20 / MS4A1 (B-Cell Marker) Antibody - With BSA and Azide 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.

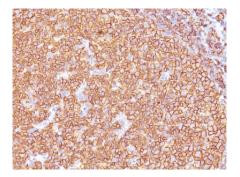
## Background

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.

#### References

Tedder, T.F., et al. 1994. CD20: a regulator of cell-cycle progression of B lymphocytes. Immunol. Today 15: 450-454

#### Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD20 Monoclonal Antibody (SPM618)

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