

CD20 Antibody [Clone B9E9]
Purified Mouse Monoclonal Antibody
Catalog # AH10076

Specification

CD20 Antibody [Clone B9E9] - Product Information

| | |
|-------------------|------------------------|
| Application | FC |
| Primary Accession | P11836 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG2a, kappa |
| Calculated MW | 33-37kDa KDa |

CD20 Antibody [Clone B9E9] - 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

Target/Specificity

Lymphoblastoid cell line Daudi

Format

0.5 ml at 100ug/ml; Conjugated to AF488

Storage

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

Precautions

CD20 Antibody [Clone B9E9] is for research use only and not for use in diagnostic or therapeutic procedures.

CD20 Antibody [Clone B9E9] - 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: [12920111](http://www.uniprot.org/citations/12920111), PubMed: [3925015](http://www.uniprot.org/citations/3925015), PubMed: [7684739](http://www.uniprot.org/citations/7684739)). Functions as a store-operated calcium (SOC) channel component promoting calcium influx after activation by the

B-cell receptor/BCR (PubMed:12920111, PubMed:18474602, PubMed:7684739).

Cellular Location

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

Tissue Location

Expressed on B-cells.

CD20 Antibody [Clone B9E9] - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD20 Antibody [Clone B9E9] - Images

CD20 Antibody [Clone B9E9] - Background

Recognizes a protein of 33-37kDa, identified as CD20 (Workshop V; Code CD20.12). B9E9 recognizes extracellular domain of CD20. The epitope is similar to or identical to that recognized by other CD20 antibodies including Leu-16 and B1. This MAb can be used for immunophenotyping of leukemia and malignant cells, B lymphocyte detection in peripheral blood, B cell localization in tissues and B lymphocyte purification by immunosorbent methods. CD20 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. Protein passes through the membrane 4 times with both ends in cytoplasm and exposes one short and one longer loop to the external environment. CD20 is not glycosylated in resting B cells and its cytoplasmic domains are differentially phosphorylated upon activation. It acts as a calcium channel involved in B-cell activation and cell cycle progression.

CD20 Antibody [Clone B9E9] - References

1. Schlossman S, et al. (eds). Leukocyte Typing V, Oxford University Press, Oxford, p511-515, 1995.
2. Tedder TF and Schlossman SF. Phosphorylation of the B1 (CD20) molecule by normal and malignant human B lymphocytes. J Biol Chem 1988, 263(20):10009-10015.
3. Buben JK et al. Transfection of the CD20 cell surface molecule into ectopic cell types generates a Ca²⁺ conductance found constitutively in B lymphocytes. J Cell Biol 1993, 121(5):1121-1132.
4. Tedder TF and Engel P. CD20: a regulator of cell-cycle progression of B lymphocytes. Immunol Today 1994, 15(9):450-454.
5. Kanzaki M et al. Expression of calcium-permeable cation channel CD20 accelerates progression through the G1 phase in Balb/c 3T3 cells. J Biol Chem 1995, 270(22):13099-13104.