

MS4A1/CD20 Antibody (C-term)

Mouse Monoclonal Antibody (Mab) Catalog # AM1990b

Product Information

Application Primary Accession	WB, IHC-P, E <u>P11836</u>
Other Accession	<u>NP_690605.1</u> , <u>NP_068769.2</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	407CT20.1.2
Calculated MW	33077
Antigen Region	266-294

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	This MS4A1/CD20 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 266-294 amino acids from the C-terminal region of human MS4A1/CD20.
Dilution	WB~~1:500~1000 IHC-P~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MS4A1/CD20 Antibody (C-term) 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

This gene encodes a member of the membrane-spanning 4A gene family. Members of this nascent protein family are characterized by common structural features and similar intron/exon splice boundaries and display unique expression patterns among hematopoietic cells and nonlymphoid tissues. This gene encodes a B-lymphocyte surface molecule which plays a role in the development and differentiation of B-cells into plasma cells. This family member is localized to 11q12, among a cluster of family members. Alternative splicing of this gene results in two transcript variants which encode the same protein.

References

Weber, M.S., et al. Ann. Neurol. 68(3):369-383(2010) Wu, D., et al. Am. J. Clin. Pathol. 134(2):258-265(2010) de Haij, S., et al. Cancer Res. 70(8):3209-3217(2010) Beers, S.A., et al. Semin. Hematol. 47(2):107-114(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010)

Images



AM1990b staining MS4A1/CD20 in human tonsil tissue sections by Immunohistochemistry (IHC-P paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/100) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded Human tonsil section using Pink1(Cat#AM1990b). AM1990b was diluted at 1:1000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

MS4A1/CD20 Antibody (C-term) (Cat. #AM1990b) western blot analysis in Ramos cell line lysates (35µg/lane).This



demonstrates the MS4A1/CD20 antibody detected the MS4A1/CD20 protein (arrow).

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