

Mouse anti-Human CD20/MS4A1 Monoclonal Antibody | anti-MS4A1 antibody

CD20/MS4A1 (B-Cell Marker)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA23945	Mouse	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

CD20/MS4A1; Monoclonal Antibody; CD20/MS4A1 (B-Cell Marker); APY; ATOPY; 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; IGHF; LEU16; Leukocyte surface antigen Leu-16; Ly44; Membrane spanning 4 domains subfamily A member 2; Membrane-spanning 4-domains subfamily A member 1 (MS4A1); anti-MS4A1 antibody

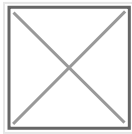
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	MS4A1/3409
Specificity	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.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/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.
Sequence Length	297
Applicable Applications for anti-MS4A1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	ELISA: Use Ab at 2-4ug/ml for coating (Order Ab without BSA) FC/FACS: 1-2ug/million cells IF: 1-2ug/ml WB: 1-2ug/ml Immunohistochemistry (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)
Positive Control	Jurkat, Daudi, Raji or U266 cells. Lymph node and Tonsil.
Immunogen	A recombinant fragment (around aa 213-297) of human MS4A1 protein (exact sequence is proprietary)
Cellular Localization	Cell Surface
Hu-chromosome Location	11q12.2

Preparation and Storage

Antibody with azide: store at 2 to 8 degree C.
Antibody without azide: store at -20 to -80 degree C.
Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



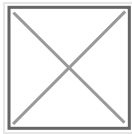
Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using CD20 Mouse Recombinant Monoclonal Antibody (MS4A1/3409). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



WB (Western Blot)

Western Blot Analysis of Raji cell lysate using CD20 Mouse Monoclonal Antibody (MS4A1/3409).



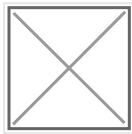
IF (Immunofluorescence)

Immunofluorescence staining of Raji cells using CD20 Mouse Monoclonal Antibody (MS4A1/3409) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.



FCM (Flow Cytometry)

Flow Cytometric Analysis of Raji cells using CD20 Mouse Monoclonal Antibody (MS4A1/3409) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



SDS-PAGE

SDS-PAGE Analysis Purified CD20 Mouse Monoclonal Antibody (MS4A1/3409). Confirmation of Purity and Integrity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Tonsil stained with CD20 Mouse Monoclonal Antibody (MS4A1/3409).

ADDITIONAL INFORMATION

References

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

NCBI AND UNIPROT INFORMATION

NCBI GI #	115968
NCBI GeneID	931
UniProt Accession #	P11836
Molecular Weight	33-37kDa
NCBI Official Full Name	B-lymphocyte antigen CD20
NCBI Official Synonym Full Names	membrane spanning 4-domains A1
NCBI Official Symbol	MS4A1
NCBI Official Synonym Symbols	B1; S7; Bp35; CD20; CVID5; MS4A2; LEU-16

NCBI Protein Information	B-lymphocyte antigen CD20
UniProt Protein Name	B-lymphocyte antigen CD20
UniProt Gene Name	MS4A1
UniProt Synonym Gene Names	CD20
UniProt Entry Name	CD20_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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