

### 36-3542: Anti-CD20 / MS4A1 (B-Cell Marker) Monoclonal Antibody(Clone: MS4A1/3409)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MS4A1/3409
<b>Application :</b>	ELISA,FACS,IF,WB,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	MS4A1
<b>Gene ID :</b>	931
<b>Uniprot ID :</b>	P11836
<b>Alternative Name :</b>	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; 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)
<b>Isotype :</b>	Mouse IgG2b, kappa
<b>Immunogen Information :</b>	A recombinant fragment (around aa 213-297) of human MS4A1 protein (exact sequence is proprietary)

#### Description

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.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/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.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

#### Application Note

ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA);,Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blotting (1-2ug/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),

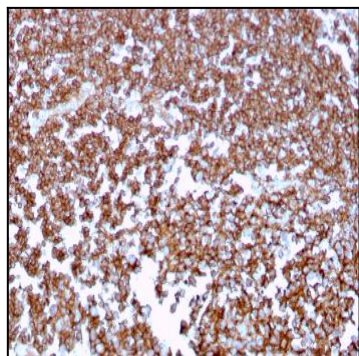


Fig. 1: Formalin-fixed, paraffin-embedded human Tonsil stained with CD20 Mouse Monoclonal Antibody (MS4A1/3409).

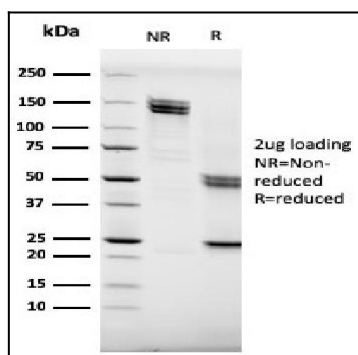


Fig. 2: SDS-PAGE Analysis Purified CD20 Mouse Monoclonal Antibody (MS4A1/3409). Confirmation of Purity and Integrity of Antibody.

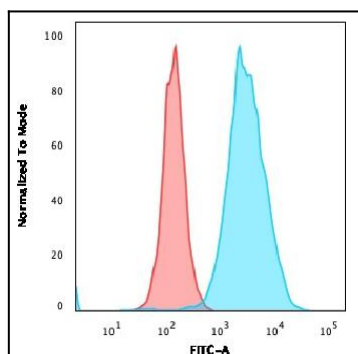


Fig. 3: Flow Cytometric Analysis of Raji cells using CD20 Mouse Monoclonal Antibody (MS4A1/3409) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

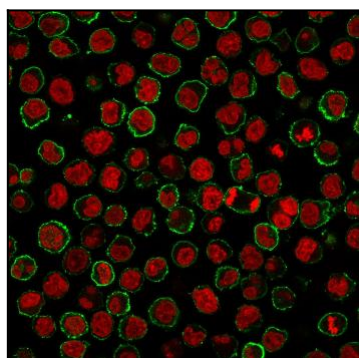


Fig. 4: Immunofluorescence staining of Raji cells using CD20 Mouse Monoclonal Antibody (MS4A1/3409) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.

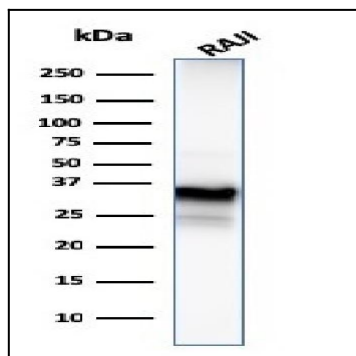


Fig. 5: Western Blot Analysis of Raji cell lysate using CD20 Mouse Monoclonal Antibody (MS4A1/3409).

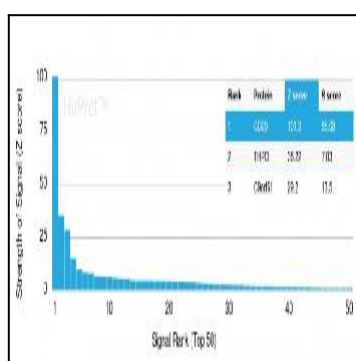


Fig. 6: Analysis of Protein Array containing more than 19,000 full-length human proteins using CD20 Mouse Recombinant Monoclonal Antibody (MS4A1/3409). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG 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.