

ARG23100 anti-B Cell antibody [FMC7] (FITC)

Package: 50 tests

Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [FMC7] recognizes B Cell Mouse anti Human B cell antibody, clone FMC7 recognizes a glycoprotein antigen of ~105 kDa expressed by B lymphocytes. The FMC7 antigen is expressed by peripheral B lymphocytes, and has been used widely in the study of B cell malignancy. Mouse anti Human B cells antibody, clone FMC7 has been used extensively to differentiate various types of B cell malignancy. B-CLL is generally considered to be negative for FMC7 expression, but strong staining is seen in many other types of B cell lymphoma, including prolymphocytic leukaemia and hairy cell leukaemia. The nature of the FMC7 antigen has remained poorly defined following its first description in 1981. The expression pattern closely corresponds to that seen with CD22, but studies have shown that FMC7 does not recognise the CD22 molecule itself. Mouse anti Human B cells antibody, clone FMC7 recognizes a conformational epitope on the CD20 molecule, most likely a multimeric complex of CD20 (Serke et al. 2001). Identity of CD20 as the antigen recognized by Mouse anti Human B cells antibody, clone FMC7 was further confirmed by strong recognition of recombinant CD20 expressed in hematopoietic and non-hematopoietic cell lines and abolition of binding in CD20 extracellular domain mutations. The recognized epitope has also been shown to be cholesterol dependent (Polyak et al. 2003).
Tested Reactivity	Hu
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	FMC7
Isotype	IgM
Target Name	B Cell
Species	Human
Immunogen	HRIK cells - Human B-Lymphoblastoid line.
Conjugation	FITC
Alternate Names	Bp35; LEU-16; B-lymphocyte surface antigen B1; B-lymphocyte antigen CD20; CD20; S7; CD antigen CD20; Leukocyte surface antigen Leu-16; B1; CVID5; Membrane-spanning 4-domains subfamily A member 1; MS4A2

Application Instructions

Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>FACS</td><td>Neat</td></tr> </table>	Application	Dilution	FACS	Neat
Application	Dilution				
FACS	Neat				
Application Note	<p>FACS: Use 10 µl of the suggested working dilution to label 10⁶ cells or 100 µl whole blood.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>				

Properties

Form	Liquid
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Purification	Purified by gel filtration.
Buffer	Tris-Glycine Buffer, 0.1% Sodium azide and 0.2% BSA
Preservative	0.1% Sodium azide
Stabilizer	0.2% BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MS4A1
Gene Full Name	membrane-spanning 4-domains, subfamily A, member 1
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. [provided by RefSeq, Jul 2008]
Function	This protein may be involved in the regulation of B-cell activation and proliferation. [UniProt]
Highlight	Related products: CD20 antibodies ; CD20 ELISA Kits ; CD20 Duos / Panels ; Anti-Mouse IgM secondary antibodies ; Related news: New antibody panels and duos for Tumor immune microenvironment Tumor-Infiltrating Lymphocytes (TILs)
Research Area	Cancer antibody; Developmental Biology antibody; Immune System antibody; B cell Marker antibody; Immature B Cell Marker antibody; Inflammatory Cell Marker antibody; Tumor-infiltrating Lymphocyte Study antibody
Calculated Mw	33 kDa
PTM	Phosphorylated. Might be functionally regulated by protein kinase(s).

Images

ARG23100 anti-B Cell antibody [FMC7] (FITC) FACS image

Flow Cytometry: Human peripheral blood lymphocytes stained with ARG23100 anti-B Cell antibody [FMC7] (FITC).

