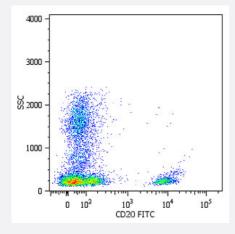


MS4A1 monoclonal antibody, clone LT20 (FITC)

Catalog # MAB4385 Size 100 Reactions

Applications



Flow Cytometry

Surface staining of human peripheral blood cells with MS4A1 monoclonal antibody, clone LT20 (FITC) (Cat # MAB4385).

Specification	
Product Description	Mouse monoclonal antibody raised against native MS4A1.
Immunogen	Native purified MS4A1 from normal human lymphocytes from lymph node.
Host	Mouse
Theoretical MW (kDa)	33-37
Reactivity	Human
Specificity	This antibody reacts with CD20 (Bp35), a 33-37 KDa non-glycosylated membrane receptor with four transmembrane domains, expressed on B lymphocytes (it is lost on plasma cells), follicular dendritic cells, and at low levels on peripheral blood T lymphocytes.
Form	Liquid
Conjugation	FΠC
Isotype	lgG2a



Product Information

Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10 ⁶ cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Flow Cytometry

Surface staining of human peripheral blood cells with MS4A1 monoclonal antibody, clone LT20 (FITC) (Cat # MAB4385).

Gene Info — MS4A1	
Entrez GenelD	<u>931</u>
Gene Name	MS4A1
Gene Alias	B1, Bp35, CD20, LEU-16, MGC3969, MS4A2, S7
Gene Description	membrane-spanning 4-domains, subfamily A, member 1
Omim ID	112210
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a member of the membrane-spanning 4A gene family. Members of this nasce nt protein family are characterized by common structural features and similar intron/exon splice bo undaries and display unique expression patterns among hematopoietic cells and nonlymphoid tis sues. 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
Other Designations	B-lymphocyte cell-surface antigen B1 CD20 antigen CD20 receptor

Publication Reference





The biological activity of human CD20 monoclonal antibodies is linked to unique epitopes on CD20.

Teeling JL, Mackus WJ, Wiegman LJ, van den Brakel JH, Beers SA, French RR, van Meerten T, Ebeling S, Vink T, Slootstra JW, Parren PW, Glennie MJ, van de Winkel JG.

Journal of Immunology 2006 Jul; 177(1):362.

Application: Flow Cyt, Human, Daudi cells

CD20-induced lymphoma cell death is independent of both caspases and its redistribution into triton X-100 insoluble membrane rafts.

Chan HT, Hughes D, French RR, Tutt AL, Walshe CA, Teeling JL, Glennie MJ, Cragg MS.

Cancer Research 2003 Sep; 63(17):5480.

Application: Func, Human, Daudi, EHRB, Raji cells

 Alanine-170 and proline-172 are critical determinants for extracellular CD20 epitopes; heterogeneity in the fine specificity of CD20 monoclonal antibodies is defined by additional requirements imposed by both amino acid sequence and quaternary structure.

Polyak MJ, Deans JP.

Blood 2002 May; 99(9):3256.

Pathway

Hematopoietic cell lineage

Disease

- Breast cancer
- Breast Neoplasms
- Genetic Predisposition to Disease
- Lymphoma
- Neoplasm Recurrence
- Ovarian cancer