

Product datasheet for **TA386249**

Ms4a1 Rabbit Monoclonal Antibody [Clone ID: 18B12]

Product data:

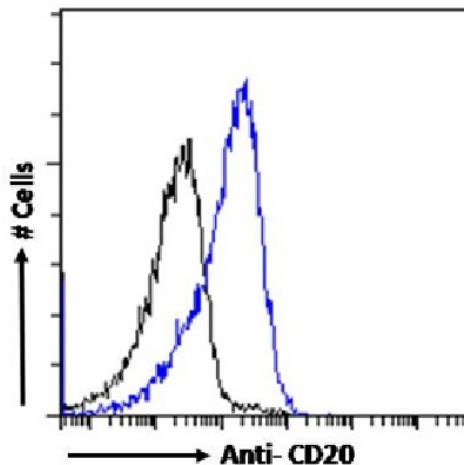
Product Type:	Primary Antibodies
Clone Name:	18B12
Applications:	FC, FN, IF, WB
Reactivity:	Mouse
Host:	Rabbit
Isotype:	IgG, kappa
Clonality:	Monoclonal
Immunogen:	This antibody was generated by immunizing CD20 ^{-/-} mice with CD20-transfected cell lines (300.18 and 70Z3) and CD20-peptide-keyhole limpet hemocyanin conjugate.
Specificity:	<p>This antibody is specific for murine CD20, which is a cell surface 33-37 (depending on the degree of phosphorylation) kDa non-glycosylated surface phosphoprotein expressed on mature and most malignant B cells, but not stem cells or plasma cells. Low number of the CD20 has been also detected on a subpopulation of T lymphocytes and it can be expressed on follicular dendritic cells. Its expression on B cells is synchronous with the expression of surface IgM. CD20 regulates transmembrane calcium conductance (probably functioning as a component of store-operated calcium channel), cell cycle progression and B-cell proliferation. CD20 serves as a useful target for antibody-mediated therapeutic depletion of B cells, as it is expressed at high levels on most B-cell malignancies, but does not become internalized or shed from the plasma membrane following mAb treatment.</p> <p>In the original publication, this antibody was used in FACS and in vivo functional assays to examine how B cell depletion affects autoimmunity (Ahuja et al., 2007). In other studies, this antibody has been used mainly in FACS, immunofluorescence, and various in vitro and in vivo functional experiments. More recent works employing this antibody have shown, for instance, that enhanced phagocytosis of circulating B cells by Kupffer cells represents an important in vivo mechanism for improved activity of glycoengineered anti-CD20 mAbs (Grandjean et al., 2016), that B lymphocytes limit senescence-driven fibrosis resolution and favor hepatocarcinogenesis in mouse liver injury (Faggioli et al., 2017), and that B cells inhibit the antitumor immunity against an established murine fibrosarcoma (Magliocco et al., 2017).</p>
Formulation:	PBS with 0.02% Proclin 300.



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Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	membrane-spanning 4-domains, subfamily A, member 1
Database Link:	Entrez Gene 12482 Mouse P19437
Synonyms:	B1; Bp35; CD20; LEU-16; MGC3969; MS4A2; S7
Note:	This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Product images:



Flow-cytometry using the Anti-CD20 antibody 18B12 (TA386249). Splenocytes were stained with anti-Fluorescein IgG antibody (clone 4-4-20; isotype control, black line) or the rabbit IgG version of 18B12 (TA386249, blue line) at a dilution of 1:100 for 1h at RT. After washing, bound antibody was detected using a goat anti-rabbit IgG AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.