

Ultra-LEAF™ Purified anti-mouse CD20 Recombinant Antibody

Catalog# / Size	161407 / 100 µg 161408 / 1 mg
Clone	QA18A73
Regulatory Status	RUO
Other Names	Ms4a1, Ly-44
Isotype	Mouse IgG2a, κ
Description	CD20 is a 33-37 kD protein, a member of the MS4A family, with four transmembrane spanning regions that present as a homo-oligomeric complexes in the cell surface when associating with MHC class I and II, CD53, CD81, and CD82. CD20 is expressed on B cells and a subset of T cells, but not on plasma cells. CD20 regulates B-cell activation and proliferation. Its ligation promotes transmembrane Ca ²⁺ trafficking. CD20 is an important therapeutic target in the treatment of B cell lymphomas and leukemias.

Product Details

Verified Reactivity	Mouse
Antibody Type	Recombinant
Host Species	Mouse
Immunogen	Mouse CD20 transfected cells
Formulation	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is < 0.01 EU/µg of the protein (< 0.001 ng/µg of the protein) as determined by the LAL test.
Preparation	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	FC - Quality tested Depletion - Verified
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This recombinant antibody clone is derived from clone SA271G2.
Additional Product Notes	A single i.v. dose of 200 µg of mAb clone QA18A73 depletes B cells from peripheral blood for more than 30 days.
RRID	AB_2910341 (BioLegend Cat. No. 161407) AB_2910341 (BioLegend Cat. No. 161408)

Antigen Details

Structure	Member of the MS4A family, four transmembrane spanning regions, three isoforms of 37, 35, and 37 kD, depending on the phosphorylation degree.
Distribution	B cells and a subset of T cells

Function	Regulates B-cell activation and proliferation
Interaction	Associates with MHC class I and II, CD53, CD81, and CD82
Antigen References	<ol style="list-style-type: none"> 1. Morsy DE, <i>et al.</i> 2013. <i>J. Immunol.</i> 191:3112. 2. Pang X, <i>et al.</i> 2017. <i>Hum Gene Ther.</i> 28(2):216-225. 3. Uchida J, <i>et al.</i> 2004. <i>Int Immunol.</i> 16(1):119-29
Gene ID	12482

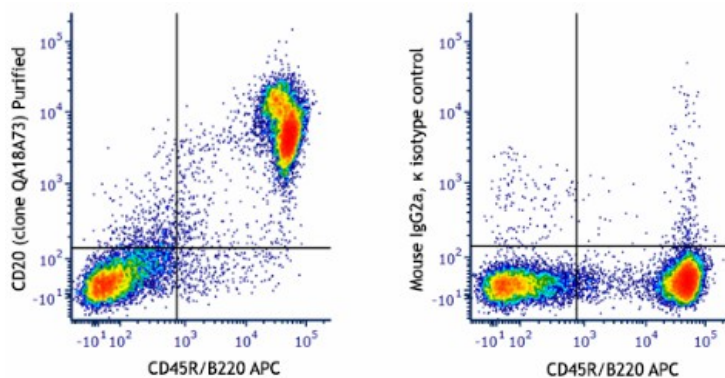
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

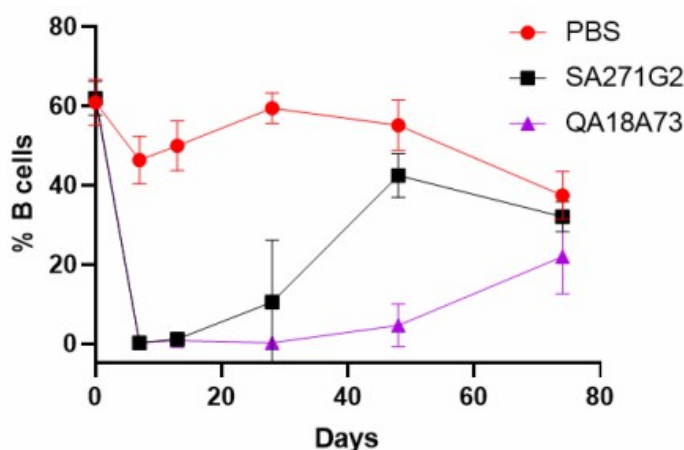
Other Formats

Purified anti-mouse CD20 Recombinant Antibody, APC anti-mouse CD20 Recombinant Antibody, PE anti-mouse CD20 Recombinant Antibody, Ultra-LEAF™ Purified anti-mouse CD20 Recombinant Antibody

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse/human CD45R/B220 APC and purified anti-mouse CD20 recombinant (clone QA18A73) (left) or purified mouse IgG2a, κ isotype control (right), followed by PE anti-mouse IgG2a.



C57BL/6 mice were retro-orbitally injected with 200 µg of Ultra-LEAF™ purified anti-mouse CD20 (clone SA271G2, black line, N=4), Ultra-LEAF™ purified anti-mouse CD20 recombinant (clone QA18A73, purple line, N=4), or vehicle only (PBS, red line, N=4). Peripheral blood was analyzed at indicated intervals, and average % B cells calculated for each group (measured as % CD19+B220+ cells).

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