

## Ultra-LEAF™ Purified anti-mouse CD20 Recombinant Antibody

<b>Catalog# / Size</b>	161407 / 100 µg 161408 / 1 mg
<b>Clone</b>	QA18A73
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Ms4a1, Ly-44
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	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 <sup>2+</sup> trafficking. CD20 is an important therapeutic target in the treatment of B cell lymphomas and leukemias.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Recombinant
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Mouse CD20 transfected cells
<b>Formulation</b>	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.
<b>Preparation</b>	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
<b>Concentration</b>	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 <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">Depletion - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.
<b>Application Notes</b>	This recombinant antibody clone is derived from clone SA271G2.
<b>Additional Product Notes</b>	A single i.v. dose of 200 µg of mAb clone QA18A73 depletes B cells from peripheral blood for more than 30 days.
<b>RRID</b>	AB_2910341 (BioLegend Cat. No. 161407) AB_2910341 (BioLegend Cat. No. 161408)

### Antigen Details

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

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

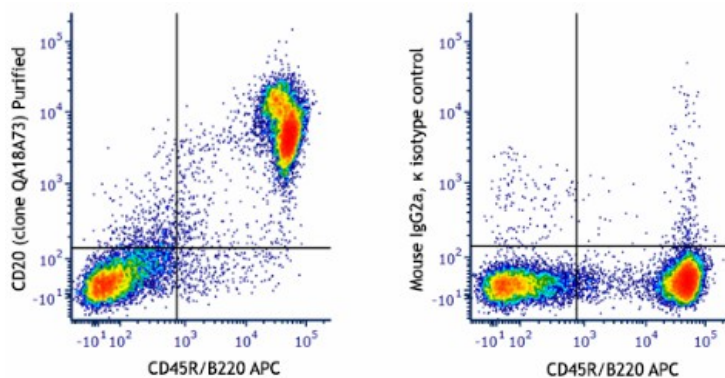
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

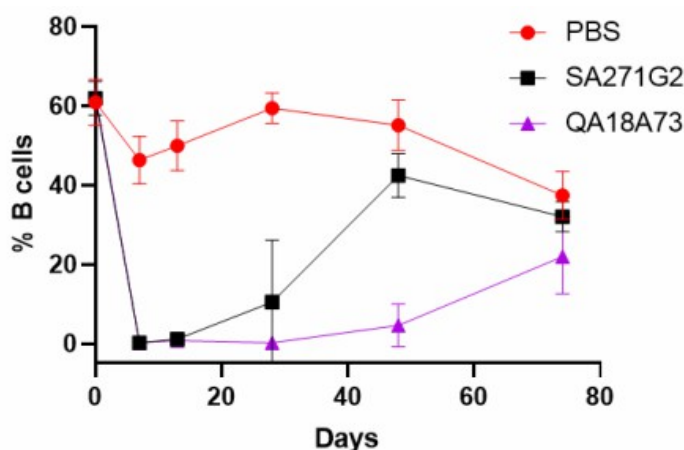
## Other Formats

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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