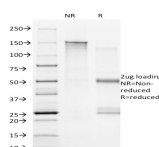


# CD20 Monoclonal Mouse Antibody (B9E9)



## Product Description

Recognizes a protein of 33-37 kDa, identified as CD20 (Workshop V; Code CD20.12). B9E9 recognizes extracellular domain of CD20. The epitope is similar to or identical to that recognized by other CD20 antibodies including Leu-16 and B1. This MAbs can be used for immunophenotyping of leukemia and malignant cells, B lymphocyte detection in peripheral blood, B cell localization in tissues and B lymphocyte purification by immunosorbent methods. CD20 is a non-Ig differentiation antigen of B-cells and its expression is restricted to normal and neoplastic B-cells, being absent from all other leukocytes and tissues. CD20 is expressed by pre B-cells and persists during all stages of B-cell maturation but is lost upon terminal differentiation into plasma cells. Protein passes through the membrane 4 times with both ends in cytoplasm and exposes one short and one longer loop to the external environment. CD20 is not glycosylated in resting B cells and its cytoplasmic domains are differentially phosphorylated upon activation. It acts as a calcium channel involved in B-cell activation and cell cycle progression.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0160, Anti-CD20 (B9E9)**

## Product attributes

<b>Antibody number</b>	#0160
<b>Antibody reactivity (target)</b>	CD20
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	B9E9
<b>Isotype</b>	IgG2a, kappa
<b>Molecular weight</b>	33-37 kDa
<b>Synonyms</b>	APY; ATOPY; B-lymphocyte cell-surface antigen B1; Bp35; Fc epsilon receptor 1 beta chain; Fc Fragment of IgE high affinity I receptor for beta polypeptide; FCER1B; High affinity immunoglobulin epsilon receptor subunit beta; IgE Fc receptor subunit beta; IGL; IGER; IGH; LEU16; Leukocyte surface antigen Leu-16; Ly44; Membrane spanning 4 domains subfamily A member 2; Membrane-spanning 4-domains subfamily A member 1 (MS4A1)
<b>Human gene symbol</b>	MS4A1
<b>Entrez gene ID</b>	931
<b>SwissProt</b>	P11836
<b>Unigene</b>	712553
<b>Immunogen</b>	Lymphoblastoid cell line Daudi
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Human
<b>Expected antibody applications</b>	Flow, surface (published for clone), Functional studies (published for clone), WB (published for clone)
<b>Antibody application notes</b>	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL. Flow cytometry 5 uL per test per one million cells in 0.1 mL, or 5 uL per 100 uL of whole blood. Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	Daudi, Raji, and U266, and human lymphocytes. In normal lymph nodes and tonsils, CD20 is predominantly detected on B cells in germinal centers.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
<b>Antibody research areas</b>	Immunology
<b>Product origin</b>	Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
<b>Cell/tissue expression</b>	B-cells, Lymphocytes
<b>Tumor expression</b>	Leukemia/lymphoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF@405S Features</a>
BNC88	CF@488A	490/515	488	GFP, FITC	<a href="#">CF@488A Features</a>
BNC68	CF@568	562/583	532, 561	RFP, TRITC	<a href="#">CF@568 Features</a>
BNC94	CF@594	593/614	561	Texas Red®	<a href="#">CF@594 Features</a>
BNC40	CF@640R	642/662	633-640	Cy@5	<a href="#">CF@640R Features</a>
BNC47	CF@647	650/665	633-640	Cy@5	<a href="#">CF@647 Features</a>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Blood (2002) 100(13), 4512-4520. (surface Flow)
2. Cancer Res (2000) 60, 7170 -7176. (receptor activation)
3. Blood (2003) 101 (7), 2507-2513. (WB)

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Product link: <https://biotium.com/product/monoclonal-anti-cd20-b9e9/>