

Anti-Human CD20 Antibody, Clone 2H7

Antibodies

Mouse monoclonal IgG2b antibody against human, rhesus, cynomolgus CD20, unconjugated

Catalog #60008

100 µg 0.5 mg/mL



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Product Description

Antibody 2H7 reacts with CD20, an ~35 kDa non-glycosylated type 1 transmembrane protein in the MS4A protein family. The CD20 polypeptide transverses the cell membrane four times, with only a minor portion of the protein displayed on the cell surface. The epitope recognized by antibody 2H7 has been mapped to the amino acid sequence YNCEPANPSEKNSPST, located in the large extracellular loop of CD20. CD20 is expressed on pre-B cells, resting and activated B cells, some follicular dendritic cells, and a subset of T cells. Expression by B cells is lost upon their differentiation into plasma cells. By associating with several proteins, including the B cell receptor (CD79), MHC class I and II, CD53, CD81 and CD82, CD20 is involved in initiating intracellular signaling pathways that modulate the activation, proliferation and differentiation of B cells. It is thought that CD20 forms multi-subunit ion channels which regulate calcium ion flux across the plasma membrane. Activation of CD20 is accompanied by pronounced phosphorylation of the cytoplasmic domain of the ~33 kDa apo-protein, with the appearance of 35 - 37 kDa isoforms which associate with Src family kinases such as Fyn, Lck and Lyn.

Target Antigen Name:	CD20
Alternative Names:	B1, Bp35
Gene ID:	931
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, Capuchin Monkey, Pigtailed Macaque, Squirrel Monkey
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	2H7
Isotype:	IgG2b, kappa
Immunogen:	Human tonsillar B cells
Conjugate:	Unconjugated

Applications

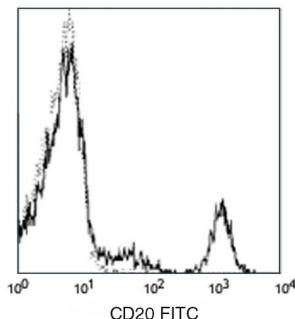
Verified:	FC
Reported:	CyTOF®, FC, IHC, IP
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human CD19 Positive Selection Kit (Catalog #18054) and EasySep™ HLA Whole Blood Lymphoid Positive Selection Kit (Catalog #18684HLA).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please request a lot-specific Certificate of Analysis from techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 2.0 µg per 1 x 10 ⁶ cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood lymphocytes labeled with Anti-Human CD20 Antibody, Clone 2H7, followed by anti-mouse IgG, FITC (solid line histogram) or a mouse IgG2b, kappa isotype control antibody followed by anti-mouse IgG, FITC (dashed line histogram).

Related Products

PRODUCT NAME	CATALOG #	SIZE
Anti-Human CD20 Antibody, Clone 2H7	60008	100 µg
Anti-Human CD20 Antibody, Clone 2H7, PE	60008PE	100 tests
Anti-Human CD20 Antibody, Clone 2H7, PE	60008PE.1	25 tests
Anti-Human CD20 Antibody, Clone 2H7, Alexa Fluor® 488	60008AD	100 tests

References

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