SANTA CRUZ BIOTECHNOLOGY, INC.

CD20 (LT20): sc-51531



BACKGROUND

CD20 is a leukocyte surface antigen consisting of four transmembrane regions and cytoplasmic N- and C-termini. The cytoplasmic domain of CD20 contains multiple phosphorylation sites, leading to additional isoforms. CD20 is expressed primarily on B cells, but has also been detected on both normal and neoplastic T cells. CD20 functions as a calcium-permeable cation channel, and it is known to accelerate the G₀ to G₁ progression induced by IGF-1. CD20 is activated by the IGF-1 receptor via the α subunits of the heterotrimeric G proteins. Activation of CD20 significantly increases DNA synthesis and is thought to involve basic helix-loop-helix leucine zipper transcription factors.

REFERENCES

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- 4. Algino, K.M., et al. 1996. CD20 (pan-B cell antigen) expression on bone marrow-derived T cells. Am. J. Clin. Pathol. 106: 78-81.
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- 7. Kanzaki, M., et al. 1997. Activation of the calcium-permeable cation channel CD20 expressed in BALB/c 3T3 cells by Insulin-like growth factor-1. J. Biol. Chem. 272: 4964-4969.
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CHROMOSOMAL LOCATION

Genetic locus: MS4A1 (human) mapping to 11q12.2.

SOURCE

CD20 (LT20) is a mouse monoclonal antibody raised against normal human lymphocytes from lymph node.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

Each vial contains 100 $\mu g~lgG_{2a}$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD20 (LT20) is available conjugated either phycoerythrin (sc-51531 PE, 100 tests in 2 ml) or fluorescein (sc-51531 FITC, 100 tests in 2 ml), for IF, IHC(P) and FCM.

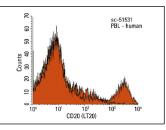
APPLICATIONS

CD20 (LT20) is recommended for detection of CD20 of human origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for CD20 siRNA (h): sc-29972, CD20 shRNA Plasmid (h): sc-29972-SH and CD20 shRNA (h) Lentiviral Particles: sc-29972-V.

Molecular Weight of CD20 isoforms: 33-37 kDa.

DATA



CD20 (LT20): sc-51531. Indirect FCM analysis of human peripheral blood leukocytes stained with CD20 (LT20), followed by PE-conjugated goat anti-mouse $\lg G_{2a}$: sc-3765. Black line histogram represents the isotype control, normal mouse $\lg G_{2a}$: sc-3878.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



See **CD20 (D-10): sc-393894** for CD20 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647.