CD20 (2H7): sc-58981

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


CHROMOSOMAL LOCATION

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

SOURCE

CD20 (2H7) is a humanized mouse monoclonal antibody raised against tumor antigens of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG2b in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as fluorescein (sc-58981 FITC), PerCP (sc-58981 PerCP) or PerCP-Cy5.5 (sc-58981 PCPC5) conjugates for flow cytometry, 100 tests.

APPLICATIONS

CD20 (2H7) is recommended for detection of CD20 cell surface phosphoprotein expressed in normal and malignant B cells of human origin by flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30:1:3000).

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 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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