

CD22 (H-221): sc-7932

BACKGROUND

The B lymphocyte specific CD22 antigen, also designated B lymphocyte cell adhesion molecule (BLCAM), sialic acid-binding Ig-like lectin 2 (Siglec-2) and Leu-14, is a type I integral membrane glycoprotein, structurally similar to other cell adhesion molecules (CAMs), which acts as a regulator of B cell signaling. CD22 is expressed as both a cytoplasmic and membrane protein during discrete stages of B cell lymphocyte differentiation. The cytoplasmic form of CD22, expressed early in B cell development, is a useful marker for acute lymphocytic leukemia. The membrane form of CD22 is expressed in mature B cells prior to their differentiation into plasma cells. Alternative splicing results in two different isoforms, CD22 α and CD22 β . The CD22 β monomer is the principally occurring isoform but CD22 also appears as a heterodimer of CD22 β and the shorter isoform, CD22 α .

CHROMOSOMAL LOCATION

Genetic locus: CD22 (human) mapping to 19q13.12; Cd22 (mouse) mapping to 7 B1.

SOURCE

CD22 (H-221) is a rabbit polyclonal antibody raised against amino acids 20-240 mapping at the N-terminus of CD22 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO 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 or our catalog for detailed protocols and support products.

APPLICATIONS

CD22 (H-221) is recommended for detection of CD22 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD22 siRNA (h): sc-29807, CD22 siRNA (m): sc-29806, CD22 shRNA Plasmid (h): sc-29807-SH, CD22 shRNA Plasmid (m): sc-29806-SH, CD22 shRNA (h) Lentiviral Particles: sc-29807-V and CD22 shRNA (m) Lentiviral Particles: sc-29806-V.

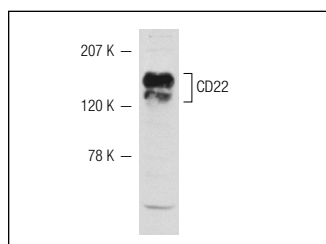
Molecular Weight of CD22: 130 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Ramos cell lysate: sc-2216 or Daudi cell lysate: sc-2415.

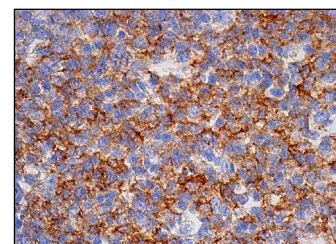
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



CD22 (H-221): sc-7932. Western blot analysis of CD22 expression in BJAB whole cell lysate.



CD22 (H-221): sc-7932. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic and membrane staining of cells in germinal center.

SELECT PRODUCT CITATIONS

- Gattenlohner, S., et al. 2003. NCAM (CD56) and RUNX1 (AML1) are up-regulated in human ischemic cardiomyopathy and a rat model of chronic cardiac ischemia. *Am. J. Pathol.* 163: 1081-1090.
- Carnahan, J., et al. 2003. Epratuzumab, a humanized monoclonal antibody targeting CD22: characterization of *in vitro* properties. *Clin. Cancer Res.* 9: 3982S-3990S.
- O'Reilly, M.K., et al. 2011. CD22 is a recycling receptor that can shuttle cargo between the cell surface and endosomal compartments of B cells. *J. Immunol.* 186: 1554-1563.
- Tuscano, J.M., et al. 2012. CD22 antigen is broadly expressed on lung cancer cells and is a target for antibody-based therapy. *Cancer Res.* 72: 5556-5565.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **CD22 (D-5): sc-271579** or **CD22 (MYG13): sc-7323**, our highly recommended monoclonal alternatives to CD22 (H-221).