SANTA CRUZ BIOTECHNOLOGY, INC.

CD79A (C-20): sc-8502

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CD79 (also designated Ig α/Ig β) is a heterodimer composed of α chains, designated CD79A or MB-1, and β chains, designated CD79B or B29. The B cell antigen receptor complex (BCR) is formed by the association of CD79 with a membrane immunoglobulin, such as IgM or IgD. The membrane immunoglobulins IgM and IgD achieve surface expression and antigen presentation function in response to CD79 association. The cytoplasmic tails of both CD79A and CD79B contain an ITAM (immuno-receptor tyrosine-based activation) motif, which acts to initiate the BCR signaling reactions by binding to and activating tyrosine kinases.

REFERENCES

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2. van Noesel, C.J., et al. 1991. The membrane IgM-associated heterodimer on human B cells is a newly defined B cell antigen that contains the protein product of the mb-1 gene. J. Immunol. 146: 3881-3888.
3. Mason, D.Y., et al. 1991. The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells. J. Immunol. 147: 2474-2482.
4. Ha, H.J., et al. 1992. Molecular cloning and expression pattern of a human gene homologous to the murine mb-1 gene. J. Immunol. 148: 1526-1531.
5. Mason, D.Y., et al. 1992. The B29 and mb-1 polypeptides are differentially expressed during human B cell differentiation. Eur. J. Immunol. 22: 2753-2756.
6. Jones, M., et al. 1993. Detection of T and B cells in many animal species using cross-reactive anti-peptide antibodies. J. Immunol. 150: 5429-5435.
7. Wood, W.J., Jr., et al. 1993. Isolation and chromosomal mapping of the human immunoglobulin-associated B29 gene (IGB). Genomics 16: 187-192.
8. Mason, D.Y., et al. 1995. CD79A: a novel marker for B cell neoplasms in routinely processed tissue samples. Blood 86: 1453-1459.
9. Macardle, P.J., et al. 1997. The antigen receptor complex on cord B lymphocytes. Immunology 90: 376-382.

CHROMOSOMAL LOCATION

Genetic locus: CD79A (human) mapping to 19q13.2; Cd79a (mouse) mapping to 7 A3.

SOURCE

CD79A (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD79A of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-8502 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD79A (C-20) is recommended for detection of CD79A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

CD79A (C-20) is also recommended for detection of CD79A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CD79A siRNA (h): sc-35025, CD79A siRNA (m): sc-35026, CD79A shRNA Plasmid (h): sc-35025-SH, CD79A shRNA Plasmid (m): sc-35026-SH, CD79A shRNA (h) Lentiviral Particles: sc-35025-V and CD79A shRNA (m) Lentiviral Particles: sc-35026-V.

Molecular Weight of CD79A: 44 kDa.

Positive Controls: Daudi cell lysate: sc-2415 or Ramos cell lysate: sc-2216.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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