SANTA CRUZ BIOTECHNOLOGY, INC.

CD79B (HM79-11): sc-59116

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: CD79B (human) mapping to 17q23; Cd79b (mouse) mapping to 11 E1.

SOURCE

CD79B (HM79-11) is an Armenian hamster monoclonal antibody raised against full length CD79A/B heterodimer of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

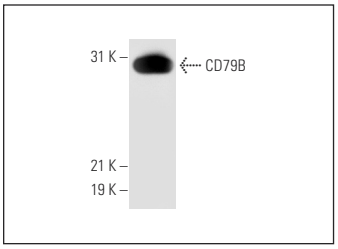
CD79B (HM79-11) is recommended for detection of CD79B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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 CD79B siRNA (h): sc-35027, CD79B siRNA (m): sc-42807, CD79B shRNA Plasmid (h): sc-35027-SH, CD79B shRNA Plasmid (m): sc-42807-SH, CD79B shRNA (h) Lentiviral Particles: sc-35027-V and CD79B shRNA (m) Lentiviral Particles: sc-42807-V

Molecular Weight of CD79B: 39 kDa.

Positive Controls: Daudi cell lysate: sc-2415, NAMALWA cell lysate: sc-2234 or Ramos cell lysate: sc-2216.

DATA



CD79B (HM79-11): sc-59116. Western blot analysis of CD79B expression in Daudi whole cell lysate.

SELECT PRODUCT CITATIONS

1. Königsberger, S., et al. 2012. Altered BCR signalling quality predisposes to autoimmune disease and a pre-diabetic state. EMBO J. 31: 3363-3374.

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 for detailed protocols and support products.