

CD79B (AT107-2): sc-59115

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

1. Poppema, S., et al. 1987. Monoclonal antibodies (MT1, MT2, MB1, MB2, MB3) reactive with leukocyte subsets in paraffin-embedded tissue sections. *Am. J. Pathol.* 127: 418-429.
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 pro-tein 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.

CHROMOSOMAL LOCATION

Genetic locus: CD79B (human) mapping to 17q23.3; Cd79b (mouse) mapping to 11 E1.

SOURCE

CD79B (AT107-2) is a rat monoclonal antibody raised against an intracellular region of CD79B of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD79B (AT107-2) is available conjugated to either phycoerythrin (sc-59115 PE) or fluorescein (sc-59115 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

APPLICATIONS

CD79B (AT107-2) is recommended for detection of an intracellular region of CD79B 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)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

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.

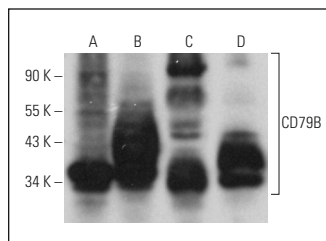
Molecular Weight of CD79B: 39 kDa.

Positive Controls: Ramos cell lysate: sc-2216, CD79B (m): 293T Lysate: sc-125117 or mouse spleen extract: sc-2391.

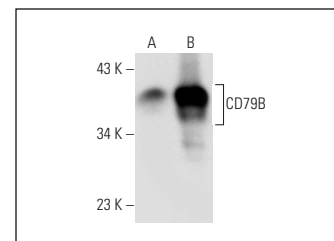
STORAGE

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

DATA



CD79B (AT107-2): sc-59115. Western blot analysis of CD79B expression in Ramos (A) and NAMALWA (B) whole cell lysates and rat lymph node (C) and mouse spleen (D) tissue extracts.



CD79B (AT107-2): sc-59115. Western blot analysis of CD79B expression in non-transfected: sc-117752 (A) and mouse CD79B transfected: sc-125117 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

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

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.