

# CD79A (JCB117): sc-53209

## BACKGROUND

CD79 (also designated Ig  $\alpha$ /Ig  $\beta$ ) is a heterodimer composed of  $\alpha$  chains, designated CD79A or MB-1, and  $\beta$  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, MB-1, MB-2, MB-3) 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 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD79A (JCB117) is a mouse monoclonal antibody raised against amino acids 202-216 of CD79A of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CD79A (JCB117) 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), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

CD79A (JCB117) is also recommended for detection of CD79A in additional species, including 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.

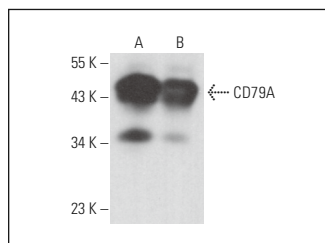
Molecular Weight of CD79A: 44 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, Daudi cell lysate: sc-2415 or Ramos cell lysate: sc-2216.

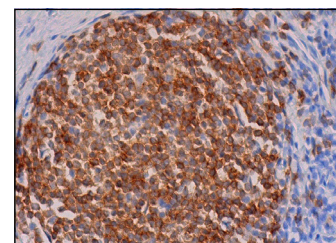
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



CD79A (JCB117): sc-53209. Western blot analysis of CD79A expression in Ramos (A) and Raji (B) whole cell lysates.



CD79A (JCB117): sc-53209. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing membrane and cytoplasmic staining of lymphoid cells.

## SELECT PRODUCT CITATIONS

1. Bolognesi, M.M., et al. 2021. Antibodies validated for routinely processed tissues stain frozen sections unpredictably. *Biotechniques* 70: 137-148.

## 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](http://www.scbt.com) for detailed protocols and support products.



See **CD79A (HM47): sc-20064** for CD79A antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.