## BACKGROUND

CD79 (also designated $\lg \alpha / \lg \beta$ ) 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 $\operatorname{lgM}$ or $\operatorname{lgD}$. The membrane immunoglobulins $\operatorname{lgM}$ and $\operatorname{lgD}$ 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 lgM-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 lgM-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; Cd79b (mouse) mapping to 11 E 1 .

## SOURCE

CD79B ( $\mathrm{N}-20$ ) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N -terminus of CD 79 B of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-8504 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

CD79B ( $\mathrm{N}-20$ ) is recommended for detection of CD79B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:501:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:301:3000).

Suitable for use as control antibody for CD79B siRNA (h): sc-35027, CD79B shRNA Plasmid (h): sc-35027-SH and CD79B shRNA (h) Lentiviral Particles: sc-35027-V.

Molecular Weight of CD79B: 39 kDa .
Positive Controls: Ramos cell lysate: sc-2216, NAMALWA cell lysate: sc-2234 or Daudi cell lysate: sc-2415.

## 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 MarkerTM 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) 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 ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



CD79B (N-20): sc-8504. Western blot analysis of CD79B expression in Ramos (A), NAMALWA (B) and Raji (C) whole cell lysates.


CD79B (N-20): sc-8504. Western blot analysis of CD79B expression in non-transfected: sc-117752 (A) and human CD79B transfected: sc-115257 (B) 2931 whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.


