

CD79B (B29/123): sc-53210

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.

CHROMOSOMAL LOCATION

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

SOURCE

CD79B (B29/123) is a mouse monoclonal antibody raised against the C-terminus of CD79B of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD79B (B29/123) is available conjugated to agarose (sc-53210 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53210 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53210 PE), fluorescein (sc-53210 FITC), Alexa Fluor® 488 (sc-53210 AF488), Alexa Fluor® 546 (sc-53210 AF546), Alexa Fluor® 594 (sc-53210 AF594) or Alexa Fluor® 647 (sc-53210 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53210 AF680) or Alexa Fluor® 790 (sc-53210 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CD79B (B29/123) is recommended for detection of CD79B of mouse, rat, human, porcine and equine 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)], 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).

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-2215, Ramos cell lysate: sc-2216 or Raji whole cell lysates: sc-364236.

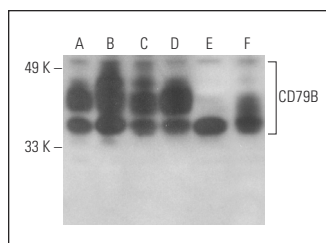
STORAGE

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

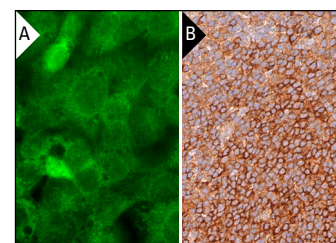
RESEARCH USE

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

DATA



CD79B (B29/123) HRP: sc-53210 HRP. Direct western blot analysis of CD79B expression in Daudi (A), NAMALWA (B), GA-10 (C), Ramos (D), Raji (E) and BJAB (F) whole cell lysates.



CD79B (B29/123): sc-53210. Immunofluorescence staining of formalin-fixed Hep G2 cells showing membrane and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing membrane and cytoplasmic staining of cells in white pulp and cells in red pulp (B).

SELECT PRODUCT CITATIONS

- Ouchida, R., et al. 2010. A role for lysosomal-associated protein transmembrane 5 in the negative regulation of surface B cell receptor levels and B cell activation. *J. Immunol.* 185: 294-301.
- Verma-Gaur, J., et al. 2012. Negative feedback regulation of antigen receptors through calmodulin inhibition of E2A. *J. Immunol.* 188: 6175-6183.
- Hauser, J., et al. 2013. Broad feedback inhibition of pre-B-cell receptor signaling components. *Mol. Immunol.* 54: 247-253.
- Darville, N., et al. 2014. Intramuscular administration of paliperidone palmitate extended-release injectable microsuspension induces a sub-clinical inflammatory reaction modulating the pharmacokinetics in rats. *J. Pharm. Sci.* 103: 2072-2087.
- Ouchida, R., et al. 2015. Fc μ R interacts and cooperates with the B cell receptor to promote B cell survival. *J. Immunol.* 194: 3096-3101.
- Levit-Zerdoun, E., et al. 2016. Survival of Ig α -deficient mature B cells requires BAFF-R function. *J. Immunol.* 196: 2348-2360.
- Dawson, H.D. and Lunney, J.K. 2018. Porcine cluster of differentiation (CD) markers 2018 update. *Res. Vet. Sci.* 118: 199-246.
- Choi, J., et al. 2020. Regulation of B cell receptor-dependent NF κ B signaling by the tumor suppressor KLHL14. *Proc. Natl. Acad. Sci. USA.* 117: 6092-6102.

PROTOCOLS

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA