

DESCRIPTION

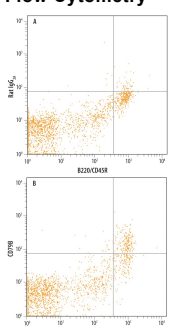
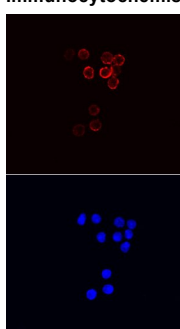
Species Reactivity	Mouse
Specificity	Detects mouse CD79B in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 735451
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CD79B Met29-Asp158 Accession # P15530
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p>  <p>Detection of CD79B in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Rat Anti-Mouse CD79B Monoclonal Antibody (Catalog # MAB6814) followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113) and Rat Anti-Mouse B220/CD45R PE-conjugated Monoclonal Antibody (Catalog # FAB1217P). Quadrant markers were set based on control antibody staining (Catalog # MAB006).</p>	<p>Immunocytochemistry</p>  <p>CD79B in Mouse Splenocytes. CD79B was detected in immersion fixed mouse splenocytes using Rat Anti-Mouse CD79B Monoclonal Antibody (Catalog # MAB6814) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red, upper panel; Catalog # NL013) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CD79B (also known as B29, Igβ and B cell antigen receptor complex-associated protein β-chain) is a 37-39 kDa member of the Ig-Superfamily. It is expressed on B cells and forms a covalent heterodimer with CD79A. This complex interacts noncovalently with membrane Ig, forming the B cell antigen receptor. Within this complex, membrane Ig detects antigen while CD79A:B initiates signaling. CD79B is also required for formation of pre-B cells during B cell development. Mature mouse CD79B is a 203 amino acid (aa) type I transmembrane glycoprotein (aa 26-228). It contains an extracellular region with one V-type Ig-like domain (aa 41-132) and an ITAM-containing cytoplasmic domain (aa 181-228). CD79B may migrate as two bands in SDS-PAGE. One defines the standard 37 kDa form, while a second represents one of two possible isoforms, the first of which is an underglycosylated full-length CD79B, and the second of which is an alternative splice form that likely lacks the C-terminal 32 amino acids. Mouse CD79A and CD79B share only 24% aa identity. Over aa 29-158, mouse CD79B shares 54% and 78% aa identity with human and rat CD79B, respectively.