

**DESCRIPTION**

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

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

**DATA**

<p><b>Flow Cytometry</b></p> <p><b>Detection of CD79B in Mouse Splenocytes by Flow Cytometry.</b> 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><b>Immunocytochemistry</b></p> <p><b>CD79B in Mouse Splenocytes.</b> 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 <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.