

DESCRIPTION

Source Chinese Hamster Ovary cell line, CHO-derived human CD79B protein
Ala29-Asp159, with a C-terminal 6-His tag
Accession # P40259-1

N-terminal Sequence Analysis Ala29

Predicted Molecular Mass 16 kDa

SPECIFICATIONS

SDS-PAGE 21 - 44 kDa, reducing conditions

Activity Bioassay data are not available.

Endotoxin Level <0.10 EU per 1 µg of the protein by the LAL method.

Purity >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

Formulation Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 250 µg/mL in PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

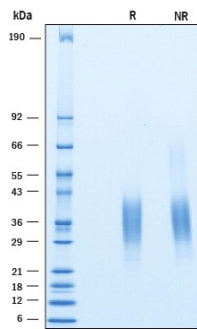
DATA

Binding Activity



The Innovator Series.
R&D Systems proteins are almost always sold with a bioassay to indicate activity. However, we recognize that sometimes proteins might be novel, and their bioactivity may not be well understood. In addition, some researchers may wish to use polypeptides to make antibodies. To facilitate the advancement of new science, we now offer our Innovator Series of proteins.

SDS-PAGE



2 µg/lane of Recombinant Human CD79B was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® blue staining, showing bands at 21 - 44 kDa.

BACKGROUND

CD79B (also known as B29, Ig beta and B cell antigen receptor complex-associated protein beta-chain) is a 36-40 kDa member of the Ig-Superfamily. It is expressed on B cells, and forms a covalent heterodimer with CD79A. This complex interacts non-covalently with membrane Ig, forming the B cell antigen receptor. Within this complex, membrane Ig detects antigen while CD79AB initiates signaling (1). Mature human CD79B is a 201 amino acid (aa) type I transmembrane glycoprotein (aa 29-229). It contains an extracellular region with one V-type Ig-like domain (aa 38-138) and an ITAM-containing cytoplasmic domain (aa 185-213) (2). There is an alternative splice form that shows a deletion of aa 41-144 and appears after B cell activation (3). Human CD79A and B share only 26% aa identity. Over aa 29-159, human CD79B shares 54% aa identity with mouse CD79B.

References:

1. Tseng, J. *et al.* (1997). Blood **89**:1513.
2. Radaev, S, *et al.* (2010) Structure **18**:934.
3. Hashimoto, S. *et al.* (1995) Mol. Immunol. **32**:651.