

**DESCRIPTION**

**Source** Chinese Hamster Ovary cell line, CHO-derived  
Leu29-Arg137, with a C-terminal 6-His tag  
Accession # P11911

**N-terminal Sequence Analysis** Leu29

**Predicted Molecular Mass** 13 kDa

**SPECIFICATIONS**

**SDS-PAGE** 19-26 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 and DTT. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 500 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**

Bioactivity not tested



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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.

**BACKGROUND**

CD79A (also known as Mb-1, Ig alpha and B cell antigen receptor complex-associated protein alpha -chain) is a 30-40 kDa member of the Ig-Superfamily. It is expressed on B cells, and forms a covalent heterodimer with CD79B. Heterodimers of CD79A and CD79B interacts non-covalently with membrane Ig, forming the B cell antigen receptor (BCR) (1). Within this complex, membrane Ig detects antigen while CD79AB initiates signaling (1). CD79A is essential for the differentiation of pre-B cells, and the pre-BCR regulates the surface expression of IL-7R (2). Mature mouse CD79A is a type I transmembrane glycoprotein. It contains an extracellular region (aa 29-137) with one C2-type Ig-like domain (aa 29-117), and an ITAM-containing cytoplasmic domain (aa 171-199) (3). Mouse CD79A and CD79B share only 22% amino acid (aa) identity. Over aa 29-137, mouse CD79A shares 57% and 80% amino acid identity with human and rat CD79A, respectively.

**References:**

1. Tseng, J. *et al.* (1997) *Blood*, **89**:1513.
2. Kurosaki, T. (2000) *Current opinion in immunology*, **12**:276.
3. Radaev, Sergei, *et al.* (2010) *Structure* **18**:934.