# Human CD79B Protein, His Tag

Catalog # CDB-H52H3AI

## Application

Human CD79B Protein, His Tag AIDD-Ready protein is designed for direct use in SPR assays. It is supplied in a sugar-free, glycerol-free formulation to eliminate refractive index interference in SPR. No desalting or buffer exchange is required before use, simplifying the SPR workflow and supporting high-throughput experimental validation to accelerate the transition from AI prediction to wet-lab validation.

## Features and Advantages

- **Directly compatible with SPR:** No desalting or buffer exchange required; supplied as a liquid to reduce sample preparation and improve experimental efficiency.
- **High batch-to-batch consistency:** Each lot is released using SPR QC to ensure experimental reproducibility.
- **Validated with representative drugs:** SPR binding activity is validated using representative drug antibodies to ensure suitability for drug screening and evaluation.

## Synonyms

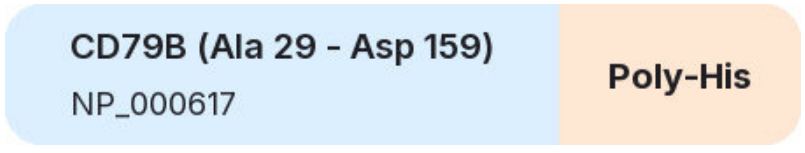
CD79b, B29, IGB, Ig-beta

## Source

Human CD79B Protein, His Tag (CDB-H52H3AI) is expressed from human 293 cells (HEK293). It contains AA Ala 29 - Asp 159 (Accession # NP_000617).

Predicted N-terminus: Ala 29

## Molecular Characterization




This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 17.1 kDa. The protein migrates as 25-35 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

## Formulation

Formulated in a proprietary trehalose-free buffer, supplied ready-to-use for SPR/BLI analysis - no buffer exchange required.

For detailed formulation, please refer to the batch-specific COA.

## Shipping and Storage

This product is supplied and shipped on dry ice.

**Please avoid repeated freeze-thaw cycles.**

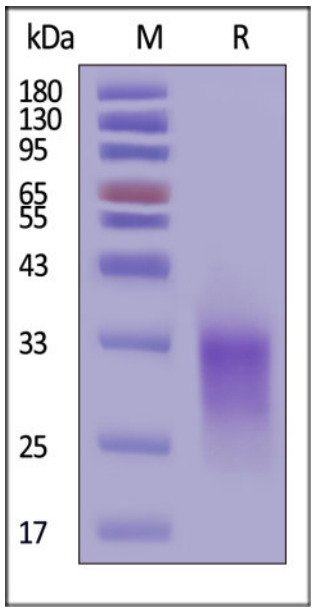
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

## ACRO Quality Management System

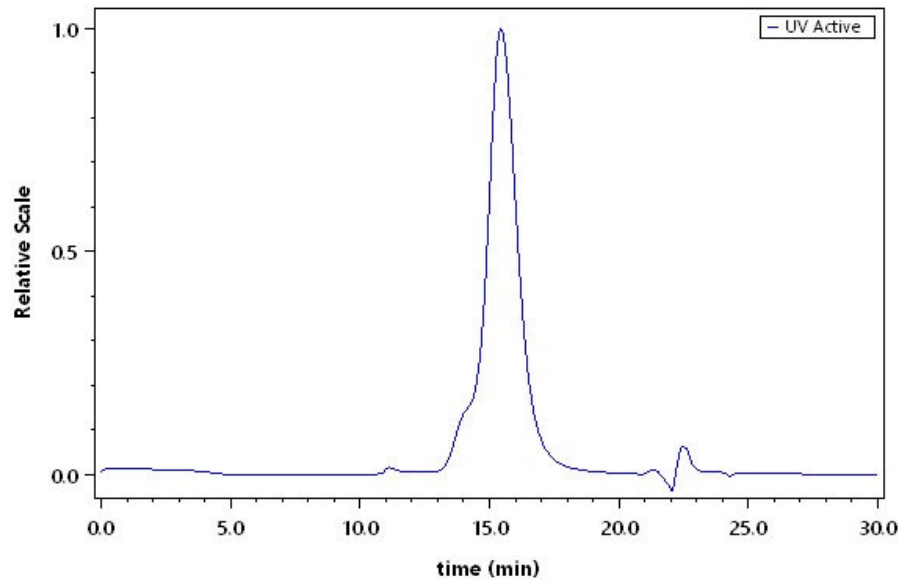
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

## SDS-PAGE



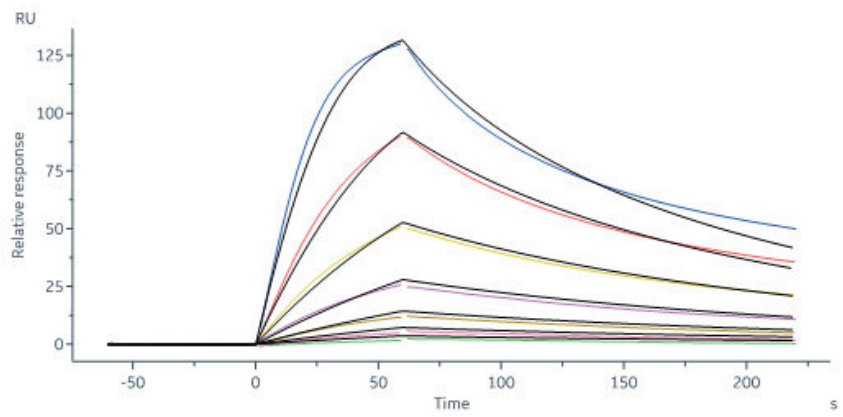

Human CD79B Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

## SEC-HPLC




The purity of Human CD79B Protein, His Tag (Cat. No. CDB-H52H3AI) was greater than 90% as determined by SEC-HPLC.

## Activity-SPR




Polatuzumab (biosimilar) captured on Protein A Chip can bind Human CD79B Protein, His Tag (Cat. No. CDB-H52H3AI) with an affinity constant of 4.47 nM as determined in a SPR assay (Biacore 8K) (QC tested).

## Background

B-cell antigen receptor complex-associated protein beta chain (CD79b) is also known as B-cell-specific glycoprotein B29, Ig-beta,Immunoglobulin-associated B29 protein, B29 and IGB, which is a single-pass type I membrane protein containing one Ig-like V-type ( immunoglobulin-like ) domain and one ITAM domain.CD79b is required in cooperation with CD79A for initiation of the signal transduction cascade activated by the B-cell antigen receptor complex (BCR).CD79b can enhance phosphorylation of CD79A, possibly by recruiting kinases which phosphorylate CD79A or by recruiting proteins which bind to CD79A and protect it from dephosphorylation. Defects in CD79b are the cause of agammaglobulinemia type 6 (AGM6) that is a primary immunodeficiency characterized by profoundly low or absent serum antibodies and low or absent circulating B cells due to an early block of B-cell development.

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