

### **Synonym**

CD79b,B29,IGB,Ig-beta

#### Source

Human CD79B, His Tag(CDB-H52H3) is expressed from human 293 cells (HEK293). It contains AA Ala 29 - Asp 159 (Accession # P40259-1). Predicted N-terminus: Ala 29

### **Molecular Characterization**

CD79B(Ala 29 - Asp 159) P40259-1

Poly-his

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

The protein has a calculated MW of 17.1 kDa. The protein migrates as 30-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, 0.2 M Arginine, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

## Storage

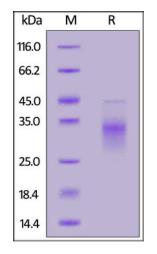
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

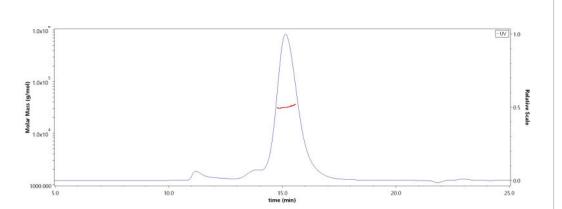
## **SDS-PAGE**



Human CD79B, 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%.

# **Bioactivity-ELISA**

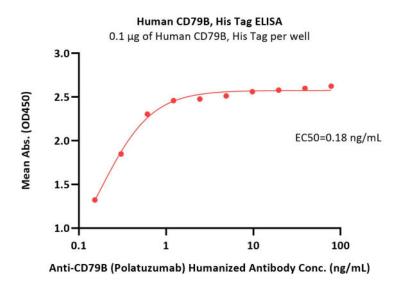
### **SEC-MALS**



The purity of Human CD79B, His Tag (Cat. No. CDB-H52H3) is more than 85% and the molecular weight of this protein is around 26-36 kDa verified by SEC-MALS.

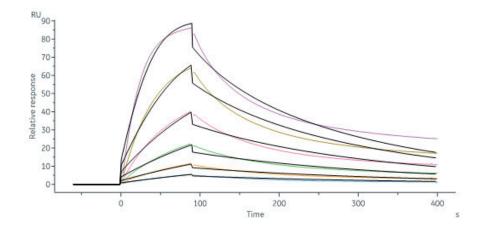
Report





Immobilized Human CD79B, His Tag (Cat. No. CDB-H52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-CD79B (Polatuzumab) Humanized Antibody with a linear range of 0.1-0.6 ng/mL (Routinely tested).

# **Bioactivity-SPR**



Polatuzumab captured on Protein G Chip can bind Human CD79B, His Tag (Cat. No. CDB-H52H3) with an affinity constant of 1.97 nM as determined in a SPR assay (Biacore 8K) (Routinely 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.

# **Clinical and Translational Updates**

