

#### **Synonym**

CD22,SIGLEC2,BL-CAM,SIGLEC-2,Siglec2,SIGLEC2FLJ22814

#### Source

Human Siglec-2, Fc Tag(CD2-H5253) is expressed from human 293 cells (HEK293). It contains AA Asp 20 - Arg 687 (Accession # P20273-1). Predicted N-terminus: Asp 20

### **Molecular Characterization**

Siglec-2(Asp 20 - Arg 687) Fc(Pro 100 - Lys 330) P20273-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 101.6 kDa. The protein migrates as 125-150 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

#### **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM NaCl, pH7.5 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

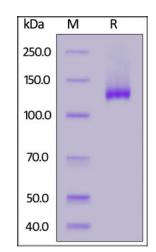
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

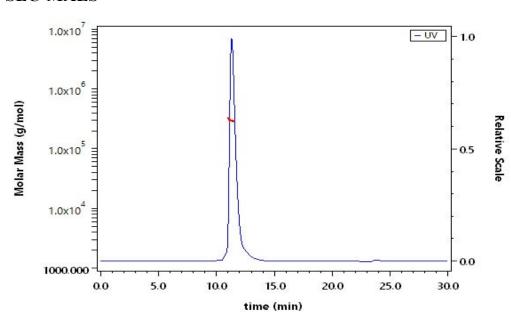
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human Siglec-2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **SEC-MALS**



The purity of Human Siglec-2, Fc Tag (Cat. No. CD2-H5253) is more than 85% and the molecular weight of this protein is around 285-300 kDa verified by SEC-MALS.

Report

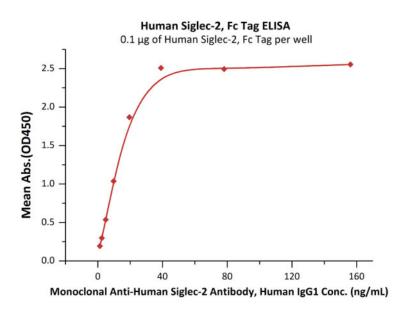
# **Bioactivity-ELISA**



# Human Siglec-2 / CD22 Protein, Fc Tag (MALS verified)







Immobilized Human Siglec-2, Fc Tag (Cat. No. CD2-H5253) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human Siglec-2 Antibody, Human IgG1 with a linear range of 2-62.5 ng/mL (QC tested).

# Background

B-cell receptor CD22 is also known as Sialic acid-binding Ig-like lectin 2 (Siglec-2), B-lymphocyte cell adhesion molecule (BL-CAM), T-cell surface antigen Leu-14, which belongs to the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. CD22 mediates B-cell B-cell interactions, and may be involved in the localization of B-cells in lymphoid tissues. Siglec-2 / CD22 binds sialylated glycoproteins, one of which is CD45. Siglec2 / CD22 plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules.

