

Product Name: Human Siglec 2 / CD22 Protein Dimer, His Tag

Product Code: CSP-25199-01

FOR RESEARCH USE ONLY (RUO)

Protein Name: Siglec 2

Alternate Name(s): cluster of differentiation 22, CD22, SIGLEC-2, SIGLEC2

Expression Host
HEK293T

Amino Acid Range
D20-R687

Protein Construct

Siglec 2/CD22 dimer protein contains a Siglec 2 extracellular domain (UniProt# P20273) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight

166 kDa. The migration range of the homodimer protein with glycosylation under non-reducing conditions is greater than 190 kDa on SDS PAGE.

Purity

Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Formulation

0.22µm filtered PBS, pH 7.4

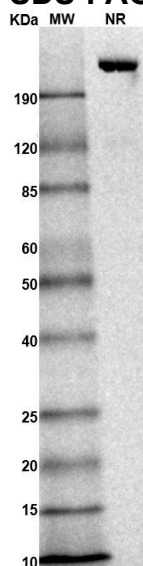
Stability & Storage

-80°C

Shipping Conditions

Frozen Dry Ice

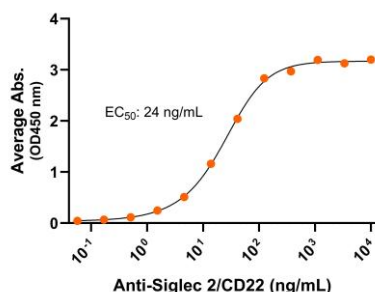
SDS-PAGE



MW: Molecular Weight marker reduced condition
NR: Siglec 2 dimer under non-reduced condition

Antibody Binding

Human Siglec 2/CD22-His dimer, ELISA
0.2 µg of Siglec 2/CD22 dimer per well



Immobilized human Siglec 2/CD22 protein dimer, His Tag (CSP-25199-01) at 2 µg/mL (100 µL/well) can bind anti-human Siglec 2 monoclonal antibody with half maximal effective concentration (EC₅₀) range of 12-48 ng/mL (QC tested).

Background

Human Sialic acid-binding Ig-like lectin 2 (Siglec 2) is a member of the sialic acid-binding immunoglobulin-like lectin (Siglec) family. Siglec 2 is also known as Cluster of Differentiation (CD22). It's part of the immunoglobulin superfamily, and a multifunctional immune regulator in the innate immune system. Siglec 2/CD22 is a Type I transmembrane protein and can form homodimers on the cell surface. It contains an extracellular domain with an N-terminal V-type immunoglobulin domain (Ig domain) and six C2-type Ig domains followed by a transmembrane domain and cytoplasmic signaling domain consisting of the immunoreceptor tyrosine-based inhibitory motif (ITIM). Siglec 2/CD22 is highly expressed on B cells and expressed to a lesser extent on dendritic cells and mast cells. It binds sialylated glycans on cell surfaces or secreted proteins, modulating cell-cell interactions and immune responses. Due to the expression of Siglec 2/CD22 being mainly restricted to B cells, it is an excellent target for immunotherapy of B cell malignancies.