

## Human Siglec-2 / CD22 Protein, Llama IgG2b Fc Tag, low endotoxin

Catalog # SI2-H525a

For Research Use Only

### Description

**Source** Human Siglec-2, Llama IgG2b Fc Tag, low endotoxin (SI2-H525a) is expressed from human 293 cells (HEK293). It contains AA Asp 20 - Arg 687 (Accession # P20273-1). Predicted N-terminus: Asp 20

**Predicted N-terminus** Asp 20

**Protein Structure**

|  |                                      |
|--|--------------------------------------|
| Siglec-2(Asp 20 - Arg 687)<br>P20273-1 | LlamaFc(Glu1 - Ser243)<br>AAX73259.1 |
|--|--------------------------------------|

**Molecular Characterization** This protein carries a llama IgG2b Fc tag at the C-terminus. The protein has a calculated MW of 103.0 kDa. The protein migrates as 120-140 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin** Less than 0.01 EU per µg by the LAL method.

**Purity** >95% as determined by SDS-PAGE.

**Bioactivity** Measured by its binding ability in a functional ELISA. Immobilized Human Siglec-2, Llama IgG2b Fc Tag, low endotoxin (Cat. No. SI2-H525a) at 2 µg/mL (100 µL/well) can bind Anti-Human CD22 with a linear range of 4-63 ng/mL (QC tested).

### Formulation and Storage

**Formulation** Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

No activity loss was observed after storage at:

- 4-8°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### Background

**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.

**References**

- (1) Hatta Y., et al., 1999, Immunogenetics 49:280-286.
- (2) Doody G.M., et al., 1995, Science 269:242-244.
- (3) Tuscano J.M., et al., 1996, Eur. J. Immunol. 26:1246-1252.

Please contact us at [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com), if you have any questions about this product.

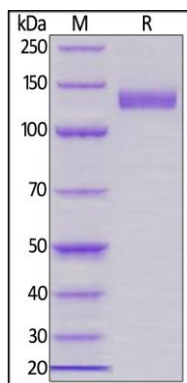
## Human Siglec-2 / CD22 Protein, Llama IgG2b Fc Tag, low endotoxin

Catalog # S12-H525a

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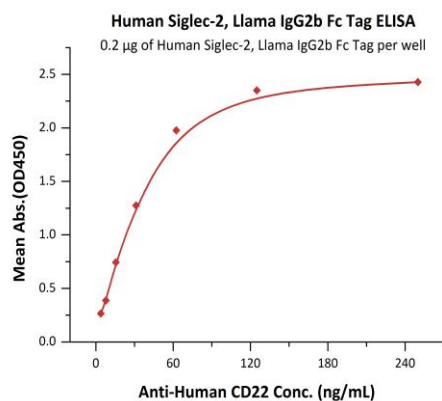
### Assay Data

#### SDS-PAGE Data



Human Siglec-2, Llama IgG2b Fc Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

#### Bioactivity Data



Immobilized Human Siglec-2, Llama IgG2b Fc Tag, low endotoxin (Cat. No. S12-H525a) at 2 µg/mL (100 µL/well) can bind Anti-Human CD22 with a linear range of 4-63 ng/mL (QC tested).

Please note that there may be a cross-reaction between anti-human IgG Fc antibodies and llama IgG Fc tag, also between anti-llama IgG Fc antibodies and human IgG Fc tag.