

Synonym

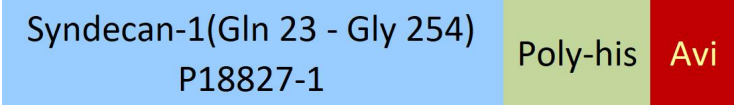
SDC1,Syndecan-1,CD138,SYND1,SDC

Source

Biotinylated Human Syndecan-1, His,Avitag(SY1-H82E2) is expressed from human 293 cells (HEK293). It contains AA Gln 23 - Gly 254 (Accession # [P18827-1](#)).

Predicted N-terminus: Gln 23

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 27.5 kDa. The protein migrates as 44-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, 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

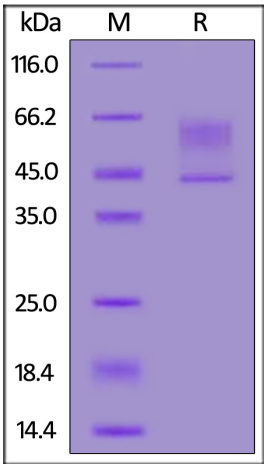
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

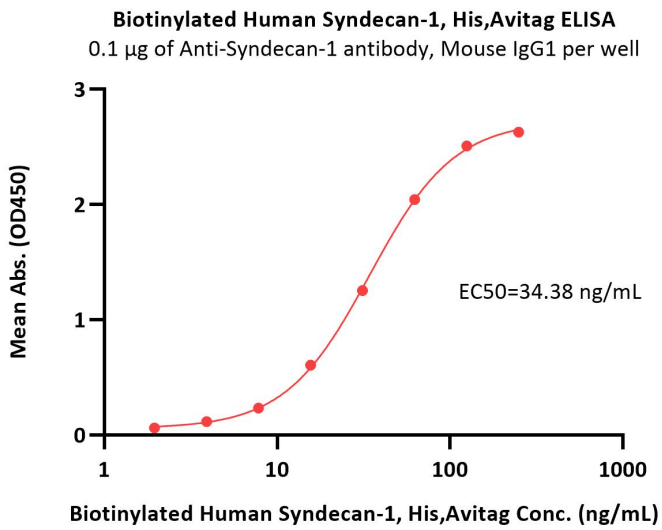
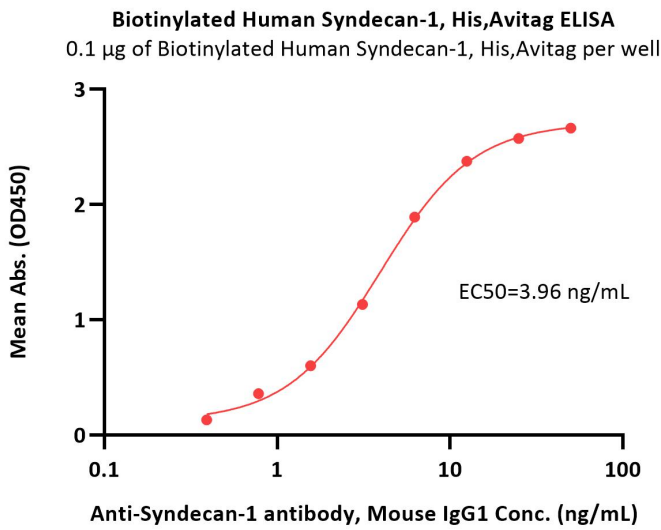
SDS-PAGE



Biotinylated Human Syndecan-1, His,Avitag 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

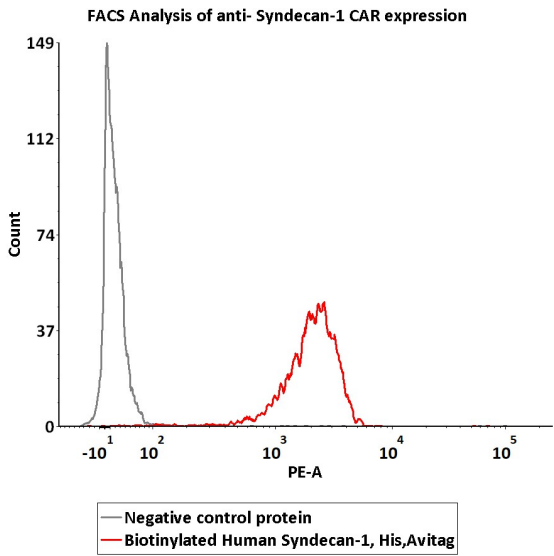




Immobilized Biotinylated Human Syndecan-1, His,Avitag (Cat. No. SY1-H82E2) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) (0.5 µg/well) plate, can bind Anti-Syndecan-1 antibody, Mouse IgG1 with a linear range of 0.4-6 ng/mL (QC tested).

Immobilized Anti-Syndecan-1 antibody, Mouse IgG1 at 1 µg/mL (100 µL/well) can bind Biotinylated Human Syndecan-1, His,Avitag (Cat. No. SY1-H82E2) with a linear range of 2-63 ng/mL (Routinely tested).

Bioactivity-FACS



2e5 of anti-Syndecan-1 CAR-293 cells were stained with 100 µL of 1 µg/mL of Biotinylated Human Syndecan-1, His,Avitag (Cat. No. SY1-H82E2) and negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (Routinely tested).

Background

Syndecan-1 (SYND1 or SDC1) is also known as CD antigen CD138, is a transmembrane (type I) heparan sulfate proteoglycan and is a member of the syndecan proteoglycan family. The syndecans mediate cell binding, cell signaling, and cytoskeletal organization and syndecan receptors are required for internalization of the HIV-1 tat protein. The syndecan-1 / SDC1 protein functions as an integral membrane protein and participates in cell proliferation, cell migration and cell-matrix interactions via its receptor for extracellular matrix proteins. It is a useful marker for plasma cells, but only if the cells tested are already known to be derived from blood.

