

## **Synonym**

ASGP-R 1, ASGPR 1, C-type lectin domain family 4 member H1, Hepatic lectin H1, HL-1

#### Source

Human ASGR1, Fc Tag(AS1-H5253) is expressed from human 293 cells (HEK293). It contains AA Gln 62 - Leu 291 (Accession # <u>P07306-1</u>). Predicted N-terminus: Pro

### **Molecular Characterization**

Fc(Pro 100 - Lys 330)	ASGR1(Gln 62 - Leu 291)
P01857	P07306-1

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

The protein has a calculated MW of 52.8 kDa. The protein migrates as 65-75 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, 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

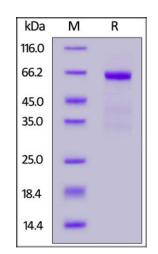
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

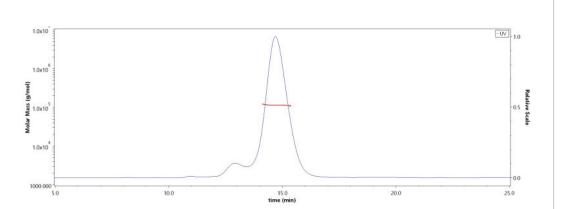
## **SDS-PAGE**



Human ASGR1, Fc 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-BLI**

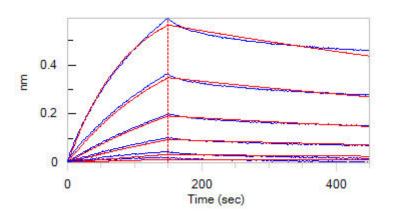
## **SEC-MALS**



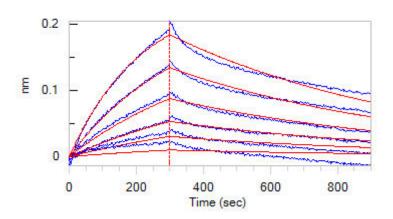
The purity of Human ASGR1, Fc Tag (Cat. No. AS1-H5253) is more than 85% and the molecular weight of this protein is around 105-125 kDa verified by SEC-MALS.

Report

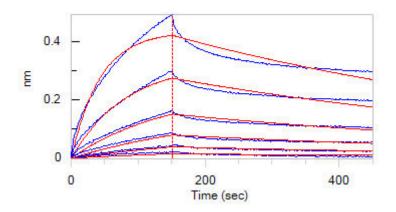




Loaded Human ASGR1, Fc Tag (Cat. No. AS1-H5253) on Protein A Biosensor, can bind SARS-CoV-2 S1 protein NTD, His Tag (Cat. No. S1D-C52H6) with an affinity constant of 401 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human ASGR1, Fc Tag (Cat. No. AS1-H5253) on Protein A Biosensor, can bind SARS-CoV-2 S1 protein with an affinity constant of 4.09 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human ASGR1, Fc Tag (Cat. No. AS1-H5253) on Protein A Biosensor, can bind SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H3) with an affinity constant of 686 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## Background

ASGPR, a transmembrane C-type lectin, recognizes a wide variety of ligands that contain either terminal galactose (Gal) or N-acetylgalactosamine (GalNAc) residues and has been identified as a highly selective receptor on hepatocytes. The ASGR is composed of both a major (ASGR1) and minor subunit (ASGR2). ASGR1 has been shown to be efficiently targeted to the plasma membrane and to undergo constitutive endocytosis and recycling and found mainly expressed in the human liver.

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

