



#### Synonym

GPC3,OCI5,Glypican-3,GTR2-2,MXR7,DGSX,SDYS,SGB,SGBS,SGBS1

#### Source

Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade(GP3-H5255) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - His 559 (Accession # P51654-1 (R355A, R358A)).

Predicted N-terminus: Gln 25

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

### **Molecular Characterization**

Glypican 3 (Gln 25 - His 559) Fc(Pro 100 - Lys 330)
P51654-1 P01857

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

The protein has a calculated MW of 87.1 kDa. The protein migrates as 230 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 0.01 EU per μg by the LAL method.

# **Host Cell Protein**

 $< 0.5 \text{ ng/}\mu\text{g}$  of protein tested by ELISA.

### **Host Cell DNA**

<0.02 ng/µg of protein tested by qPCR.

### **Sterility**

Negative

#### Mycoplasma

Negative.

#### **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **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**

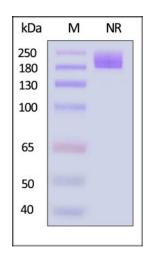
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

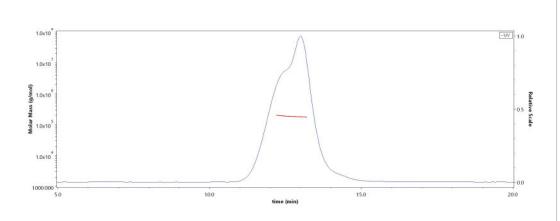
This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

#### **SDS-PAGE**



# SEC-MALS





# Human Glypican 3 / GPC3 (R355A,R358A) Protein, Fc Tag, premium grade

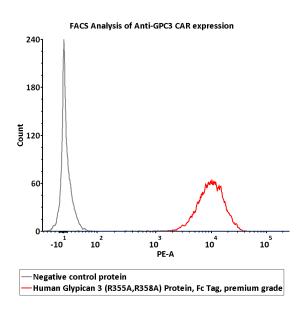
Catalog # GP3-H5255



Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

The purity of Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade (Cat. No. GP3-H5255) is more than 90% and the molecular weight of this protein is around 170-210 kDa verified by SEC-MALS. <u>Report</u>

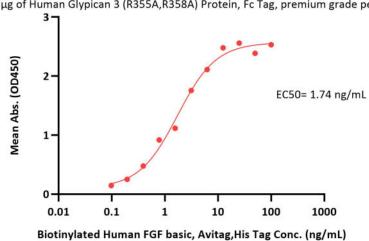
#### **Bioactivity-Bioactivity CELL BASE**



Flow cytometric analysis of Anti-GPC3 CAR-293 staining with Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade (Cat. No. GP3-H5255) (2e5 of anti-GPC3 CAR-293 cells were stained with 100 μL of 3 μg/mL of Human Glypican 3, Fc Tag), compared with negative control protein, washed and then followed by PE anti-human IgG Fc Recombinant Antibody and analyzed with FACS (QC tested).

#### **Bioactivity-ELISA**

Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade ELISA 0.5 μg of Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade per well



Immobilized Human Glypican 3 (R355A,R358A) Protein, Fc Tag, premium grade (Cat. No. GP3-H5255) at 5  $\mu g/mL$  (100  $\mu L/well$ ) can bind Biotinylated Human FGF basic, Avitag, His Tag (Cat. No. FGC-H81E3) with a linear range of 0.1-6 ng/mL (QC tested).

# Background

Glypican-3 (GPC3) is also known as Intestinal protein OCI-5, GTR2-2, MXR7, which belongs to the glypican family. Glypican 3 / GPC-3 is highly expressed in lung, liver and kidney. Glypican-3 inhibits the dipeptidyl peptidase activity of DPP4. Glypican-3 may be involved in the suppression/modulation of growth in the



# Human Glypican 3 / GPC3 (R355A,R358A) Protein, Fc Tag, premium grade

Catalog # GP3-H5255



predominantly mesodermal tissues and organs, and also may play a role in the modulation of IGF2 interactions with its receptor and thereby modulate its function.

**Clinical and Translational Updates** 

