Biotinylated Human Glypican 3 / GPC3 Protein, His,Avitag™, premium grade

Catalog # GP3-H82E5



Synonym

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

Source

Biotinylated Human Glypican 3, His, Avitag, premium grade (GP3-H82E5) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - His 559 (Accession # P51654-1).

Predicted N-terminus: Gln 25 & Ser 359

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) P51654-1 Poly-his Avi

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

This protein contains a furin-like convertase cleavage site, 355-RQYR-358, and will be partially processed into N and C-terminal fragment with calculated MW of 38.1 kDa and 26.4 kDa respectively. The protein migrates as 33 kDa, 43 kDa and 70-85 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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.

Endotoxin

Less than $0.01\ EU$ per μg by the LAL method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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 $^{\circ}$ 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.

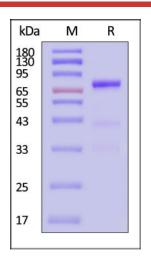
SDS-PAGE

SEC-MALS

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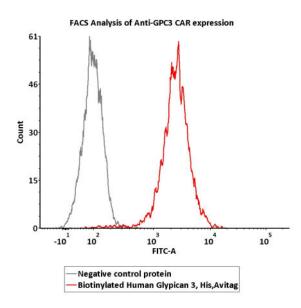
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Biotinylated Human Glypican 3, His, Avitag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

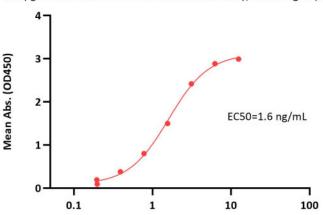
Bioactivity-FACS



2e5 of anti-GPC3 CAR-293 cells were stained with 100 μ L of 10 μ g/mL of Biotinylated Human Glypican 3, His,Avitag, premium grade (Cat. No. GP3-H82E5) and negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (Routinely tested).

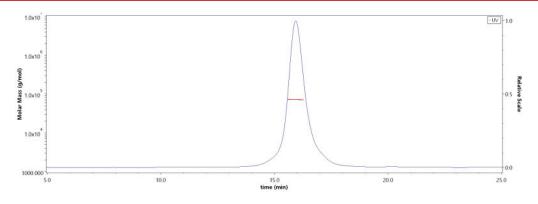
Bioactivity-ELISA

Biotinylated Human Glypican 3, His,Avitag, premium grade ELISA 0.1 μg of Monoclonal Anti-Human GPC3 Antibody, Human IgG1 per well



Biotinylated Human Glypican 3, His, Avitag, premium grade Conc. (ng/mL)

Immobilized Monoclonal Anti-Human GPC3 Antibody, Human IgG1 at 1 μ g/mL (100 μ L/well) can bind Biotinylated Human Glypican 3, His,Avitag,



The purity of Biotinylated Human Glypican 3, His,Avitag, premium grade (Cat. No. GP3-H82E5) is more than 90% and the molecular weight of this protein is around 65-75 kDa verified by SEC-MALS.

Report



Biotinylated Human Glypican 3 / GPC3 Protein, His,Avitag™, premium grade

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premium grade (Cat. No. GP3-H82E5) with a linear range of 0.2-3 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 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

