

**Synonym**

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

**Source**

PE-Labeled Human Glypican 3 Protein, His Tag (GP3-HP2H9) is produced via conjugation of PE to Human Glypican 3 Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human Glypican 3 Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Gln 25 - His 559 (Accession # [P51654-1](#)).

Predicted N-terminus: Gln 25

**Molecular Characterization**

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 75.3 kDa.

**Conjugate**

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, 0.2% BSA, 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.

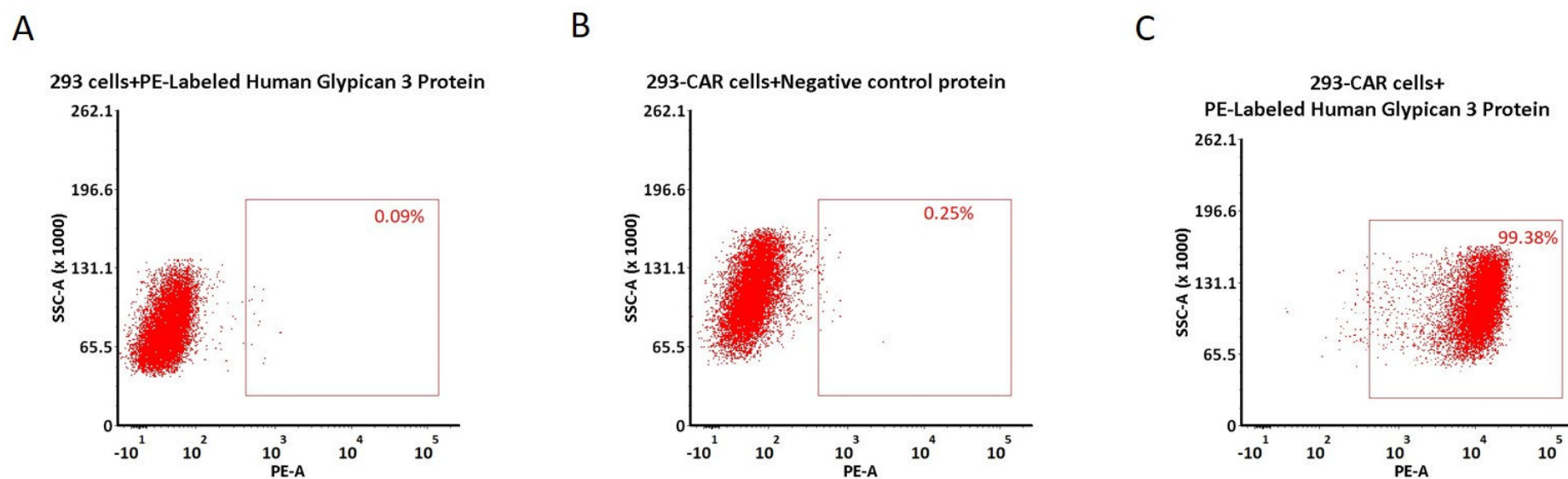
*Please protect from light and avoid repeated freeze-thaw cycles.*

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.

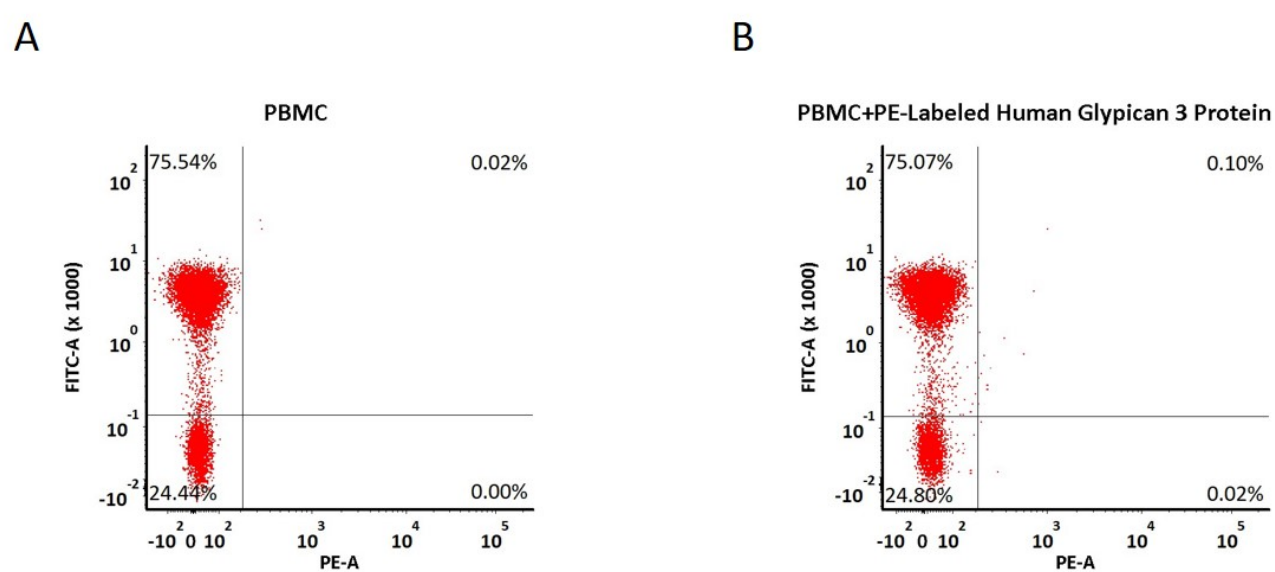
**Evaluation of CAR expression**

FACS Analysis of Anti-Glypican 3 CAR Expression



5e5 of anti-GPC3 CAR-293 cells were stained with 100 µL of 1:50 dilution (2 µL stock solution in 100 µL FACS buffer) of PE-Labeled Human Glypican 3 Protein, His Tag (Cat. No. GP3-HP2H9) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). PE signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with PE-Labeled Human Glypican 3 Protein, His Tag (Cat. No. GP3-HP2H9) and anti-CD3 antibody, washed and then analyzed with FACS. FITC signal was used to evaluate the expression of CD3+ T cells in PBMCs, and PE signal was used to evaluate the non-specific binding activity to PBMCs (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

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.