

Synonym

GUCY2C,GUC2C,STAR,STA receptor,hSTAR,GC-C

Source

Biotinylated Human GUCY2C, Fc,Avitag(GUC-H82F8) is expressed from human 293 cells (HEK293). It contains AA Ser 24 - Gln 430 (Accession # [P25092-1](#)).
Predicted N-terminus: Ser 24

Molecular Characterization

GUCY2C(Ser 24 - Gln 430) P25092-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).
The protein has a calculated MW of 74.1 kDa. The protein migrates as 90-120 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.
>90% as determined by SEC-MALS.

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

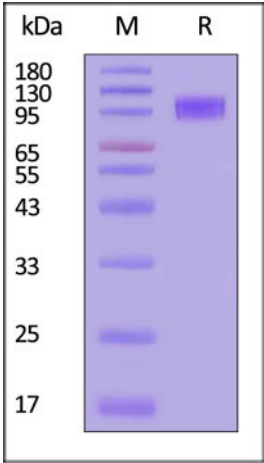
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

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:

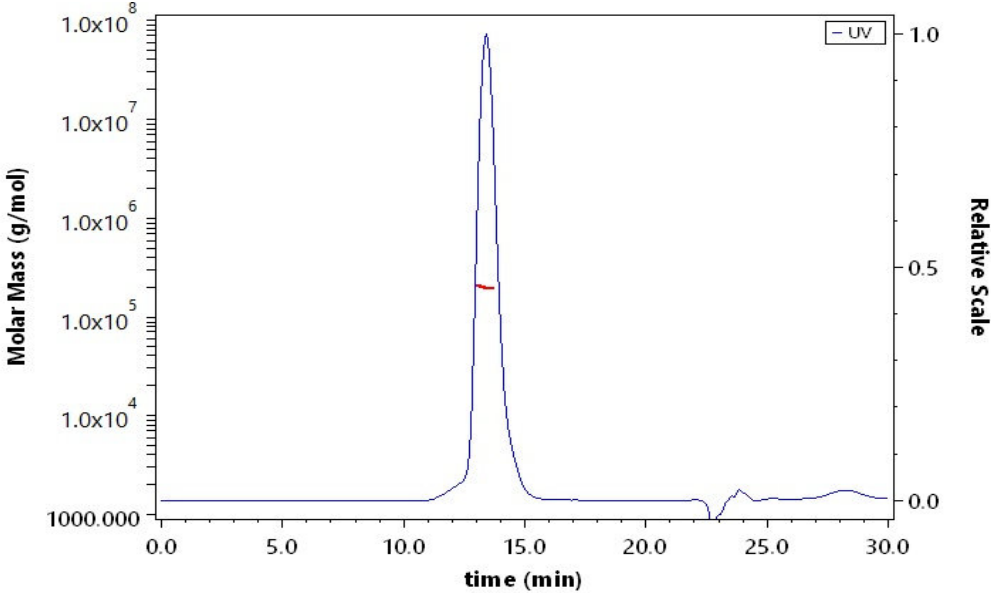
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human GUCY2C, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

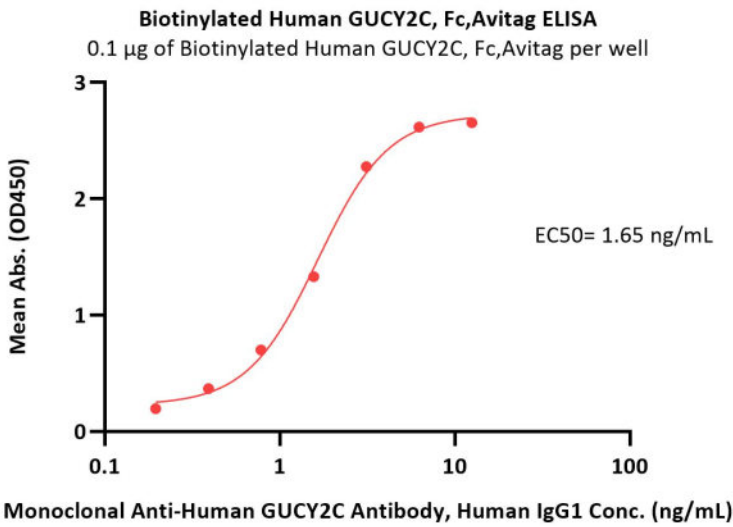
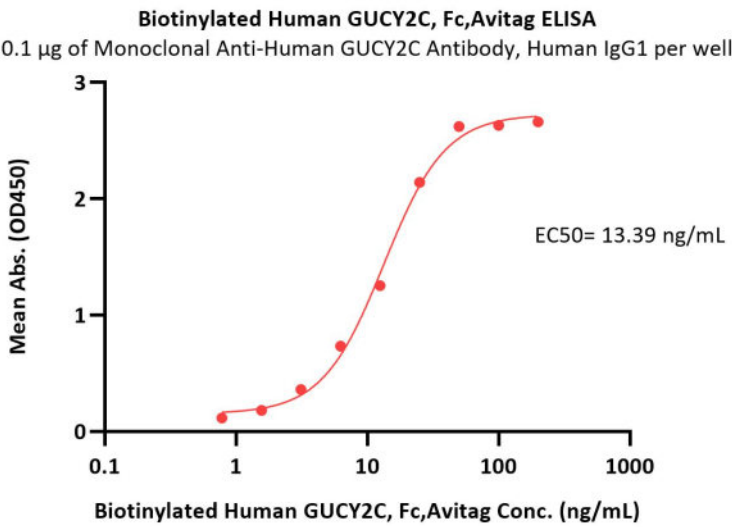
SEC-MALS



The purity of Biotinylated Human GUCY2C, Fc,Avitag (Cat. No. GUC-H82F8) is more than 90% and the molecular weight of this protein is around 190-235 kDa verified by SEC-MALS.
[Report](#)



Bioactivity-ELISA



Immobilized Monoclonal Anti-Human GUCY2C Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind Biotinylated Human GUCY2C, Fc,Avitag (Cat. No. GUC-H82F8) with a linear range of 0.8-25 ng/mL (QC tested).

Immobilized Biotinylated Human GUCY2C, Fc,Avitag (Cat. No. GUC-H82F8) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human GUCY2C Antibody, Human IgG1 with a linear range of 0.2-3 ng/mL (Routinely tested).

Background

GUCY2C (Guanylyl Cyclase C), also known as heat-stable enterotoxin receptor, is a type I transmembrane protein of the guanylate cyclase (gc) family that signal by producing cGMP. Guanylate cyclase C (GUCY2C) and its hormones guanylin and uroguanylin have recently emerged as one paracrine axis defending intestinal mucosal integrity against mutational, chemical, and inflammatory injury. GUCY2C murine CAR-T cells recognized and killed human colorectal cancer cells endogenously expressing GUCY2C. Thus, we have identified a human GUCY2C-specific CAR-T cell therapy approach that may be developed for the treatment of GUCY2C-expressing metastatic colorectal cancer.

