

Synonym

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

Source

Human GUCY2C, His Tag(GUC-H52H5) 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	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 47.9 kDa. The protein migrates as 55-85 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.

>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.

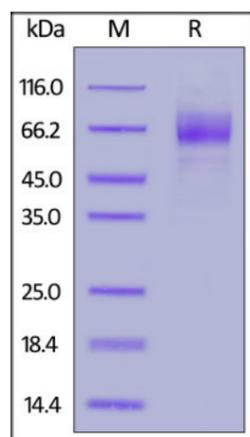
Storage

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

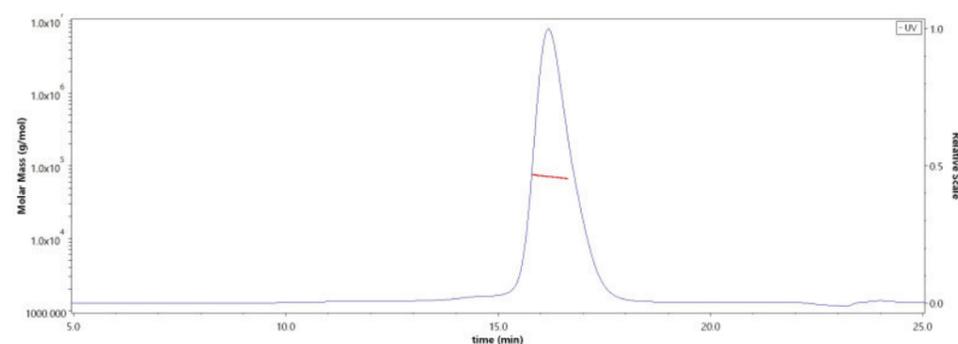
Please avoid repeated freeze-thaw cycles.

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.

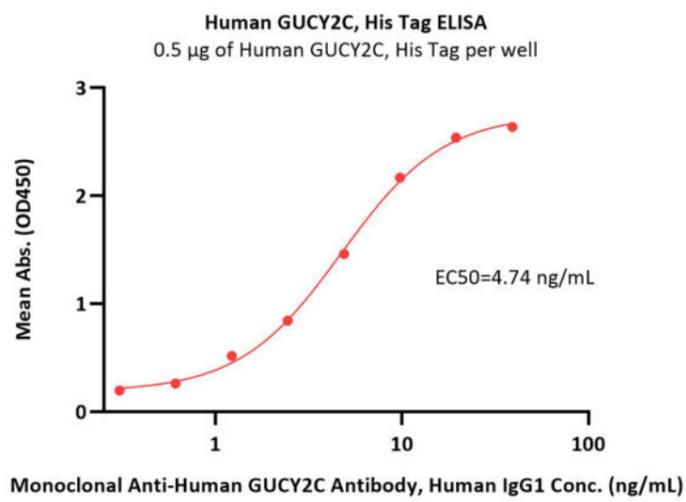
SDS-PAGE

Human GUCY2C, His 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-ELISA**SEC-MALS**

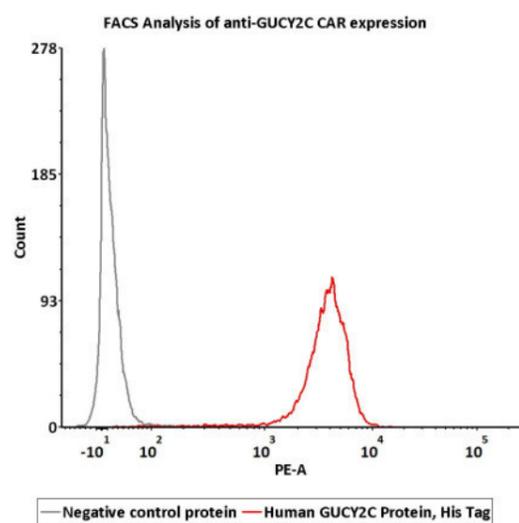
The purity of Human GUCY2C, His Tag (Cat. No. GUC-H52H5) is more than 90% and the molecular weight of this protein is around 58-78 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human GUCY2C, His Tag (Cat. No. GUC-H52H5) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-Human GUCY2C Antibody, Human IgG1 with a linear range of 0.3-5 ng/mL (QC tested).

Bioactivity-FACS



2e5 of anti-GUCY2C CAR-293 cells were stained with 100 µL of 1 µg/mL Human GUCY2C, His Tag (Cat. No. GUC-H52H5) and negative control protein respectively, washed and then followed by PE anti-His antibody and analyzed with FACS (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.

Clinical and Translational Updates

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