

**Synonym**

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

**Source**

FITC-Labeled Human GUCY2C, Fc Tag(GUC-HF255) 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
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This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 72.5 kDa. The protein migrates as 90-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Conjugate**

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

**Labeling**

*The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.*

**Protein Ratio**

The FITC to protein molar ratio is 1.5-3.5.

**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, 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.*

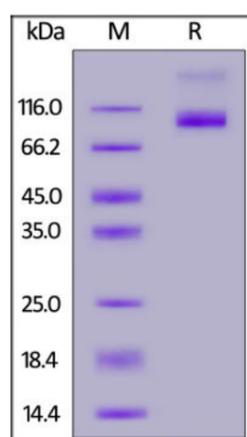
**Storage**

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.*

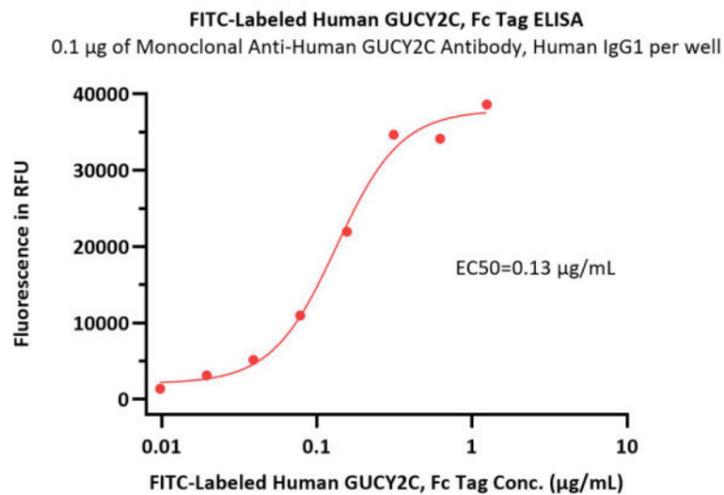
This product is stable after storage at:

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

**SDS-PAGE**

FITC-Labeled Human GUCY2C, Fc 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



Immobilized Monoclonal Anti-Human GUCY2C Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human GUCY2C, Fc Tag (Cat. No. GUC-HF255) with a linear range of 0.01-0.313 µg/mL (QC 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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.