# Mouse GUCY2C / Guanylyl cyclase C Protein, Fc Tag (MALS verified)

Catalog # GUC-M5254

## Synonym

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

## Source

Mouse GUCY2C, Fc Tag(GUC-M5254) is expressed from human 293 cells (HEK293). It contains AA Val 20 - Met 433 (Accession # Q3UWA6-1).
Predicted N-terminus: Val 20

## Molecular Characterization

| GUCY2C(Val 20 - Met 433) Q3UWA6-1 | Fc(Pro 100 - Lys 330) P01857 |
|---|---|

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 73.5 kDa. The protein migrates as 90-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

## Purity

>95% 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

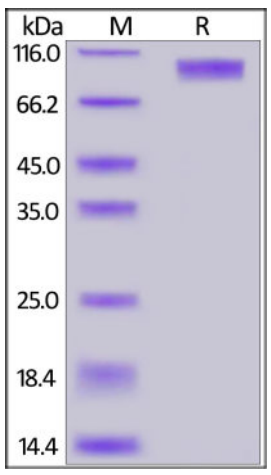
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

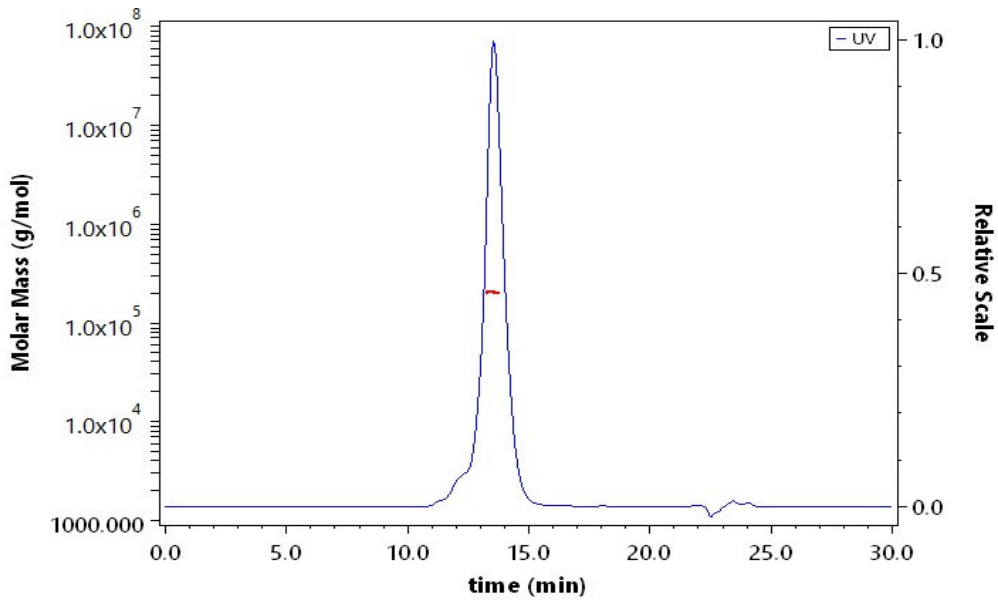
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE




Mouse 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 95%.

## SEC-MALS




The purity of Mouse GUCY2C, Fc Tag (Cat. No. GUC-M5254) is more than 90% and the molecular weight of this protein is around 195-215 kDa verified by SEC-MALS.
Report

## 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.