

Synonym

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

Source

PE-Labeled Human GUCY2C, His Tag (GUC-HP2E3) is produced via site-specific conjugation of PE to Human GUCY2C, His Tag under optimal conditions with a proprietary technology. Human GUCY2C, His Tag 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 49.6 kDa.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Application

Please note that this product is NOT compatible to streptavidin detection system.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, 0.5% BSA, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

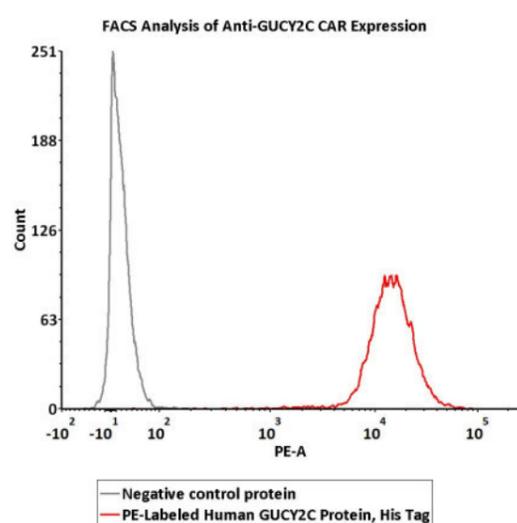
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***Storage**

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.

Bioactivity-FACS

5e5 of anti-GUCY2C 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 GUCY2C, His Tag (Cat. No. GUC-HP2E3) and negative control protein respectively. PE signal was used to evaluate the binding activity (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 if you have any question on this product.