Recombinant Human GUCY2C protein, Fc-tagged

Cat. No. GUCY2C-669H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GUCY2C protein (Ser24-Gln430) was fused to human IgG1 Fc tag at the C-terminus and expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	Ser24-Gln430
Description	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.
Predicted N Terminal	Ser24
Form	Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 150 mM NaCl, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 72.5 kDa. The protein migrates as 80-130 kDa

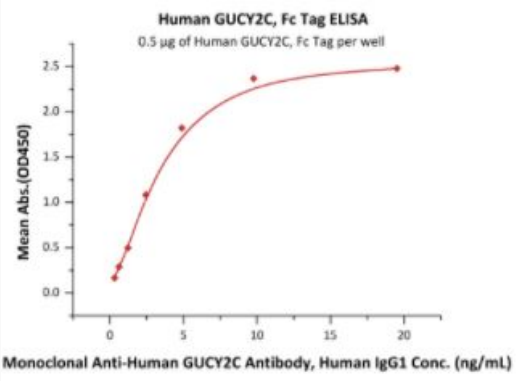
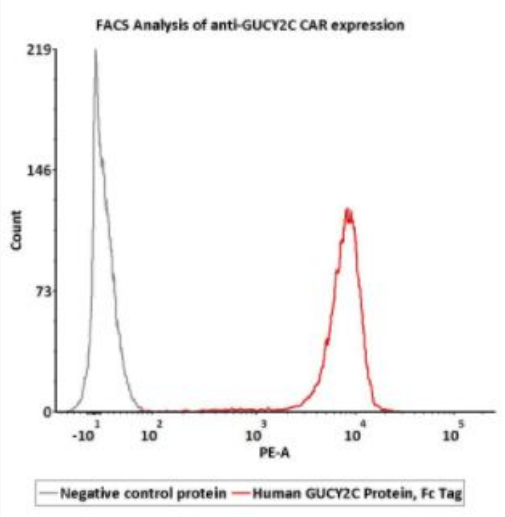
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	under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20°C or 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.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.

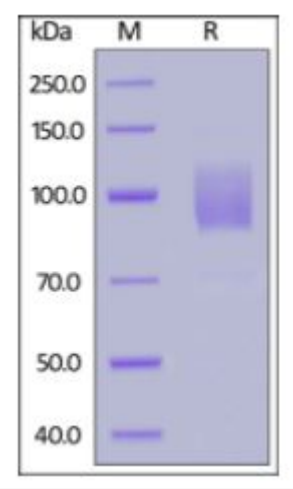
GENE INFORMATION

Gene Name	GUCY2C
Official Symbol	GUCY2C
Synonyms	GUCY2C,GUC2C,STAR,STA receptor,hSTAR,GC-C
Gene ID	2984
mRNA Refseq	NM_004963.4
Protein Refseq	NP_004954.2
MIM	601330

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UniProt ID	P25092
Bioactivity-ELISA of GUCY2C-669H	 Immobilized Human GUCY2C, Fc Tag 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 of GUCY2C-669H	 2e5 of anti-GUCY2C CAR-293 cells were stained with 100 μ of 1 g/mL Human GUCY2C, Fc Tag and negative control protein respectively, washed and then

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	followed by PE anti-human IgG Fc and analyzed with FACS (Routinely tested).
SDS-PAGE of GUCY2C-669H	 Human GUCY2C, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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