Data Sheet (Cat.No.TMPJ-00910)

TargetMol

GUCY2C Protein, Human, Recombinant (His & Avi), Biotinylated

General Information

Synonyms:	Intestinal guanylate cyclase;STAR;STA receptor;hSTAR;Heat-stable enterotoxin receptor; GUC2C;GUCY2C;GC-C;Guanylyl cyclase C
Protein Construction:	Ser24-Gln430
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P25092
Molecular Weight:	65-110 KDa (reducing condition)
AA Sequence:	Ser24-Gln430

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

GUCY2C (Guanylyl Cyclase C), also known as heat-stable enterotoxin receptor, is a type I transmembrane protein of the guanylate cyclase (gc) family. GUCY2C cell surface expression is confined to luminal surfaces of the intestinal epithelium and a subset of hypothalamic neurons. The inaccessibility of GUCY2C in the apical membranes of polarized epithelial tissue, due to subcellular restriction of GUCY2C, creates a therapeutic opportunity to target metastatic lesions of colorectal origin which have lost apicalbasolateral polarization without

concomitant intestinal toxicity. And that CAR-T cells targeting murine GUCY2C were effective against colorectal cancer metastatic to lung in the absence of intestinal toxicities. Human GUCY2C-targeted CAR that could potentially be employed in patients with GUCY2C-expressing gastrointestinal malignancies.

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