

Human GUCY2C Protein; His Tag

Product Information

Product Name Human GUCY2C Protein; His Tag

Storage temp Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt.
Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Catalog# / Size GM-88562RP-100 / 100 μg
GM-88562RP-1000 / 1 mg

Protein Information

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

Source Human GUCY2C Protein; His Tag (GM-88562RP) is expressed from human 293 cells (HEK-293). It contains AA Ser 24 - Gln 430 (Accession # P25092-1).
This protein carries a his tag at the C-terminus.

Purity > 95% as determined by SDS-PAGE

Endotoxin < 1 EU/ μg , determined by LAL gel clotting assay

Predicted Mol Mass 46.8 KDa

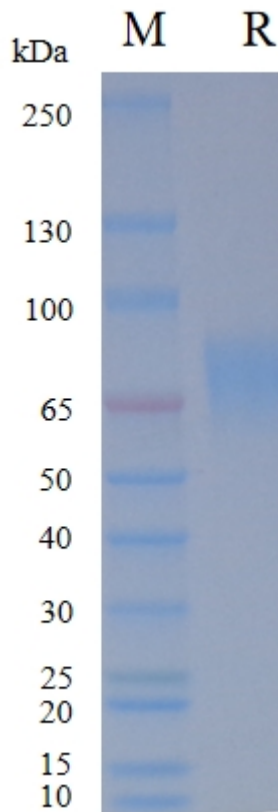
Formulation Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.

Description GUCY2C protein, the full name of which is Guanylate Cyclase 2C, is a transmembrane receptor guanylate cyclase that functions as a key regulator of intestinal epithelial homeostasis. The GUCY2C protein is encoded by the GUCY2C gene and is activated by endogenous peptide ligands such as guanylin and uroguanylin, as well as by certain bacterial enterotoxins. Upon activation, GUCY2C converts GTP to cyclic GMP (cGMP), thereby regulating ion transport, fluid secretion, cell proliferation, and differentiation in the intestinal epithelium.

GUCY2C protein plays an important role in gastrointestinal diseases and various cancers, especially colorectal cancer. It is highly and selectively expressed on the apical surface of intestinal epithelial cells and is frequently retained or overexpressed in colorectal and some gastric cancers, while showing limited expression in most normal extra-intestinal tissues. Therefore, GUCY2C is considered an attractive target for cancer diagnosis and treatment, including vaccines, antibody-drug conjugates, and other targeted therapies. Overall, GUCY2C protein is an important signaling receptor with significant potential in the research and treatment of colorectal and other gastrointestinal cancers.

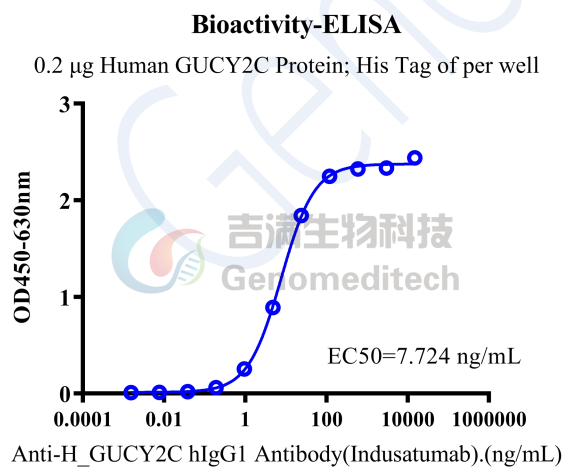
Version:4.0

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Human GUCY2C Protein; His Tag (Catalog # GM-88562RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Anti-H_GUCY2C hIgG1 Antibody (Indusatumab) (Catalog # GM-28860AB) were added.