Synonym

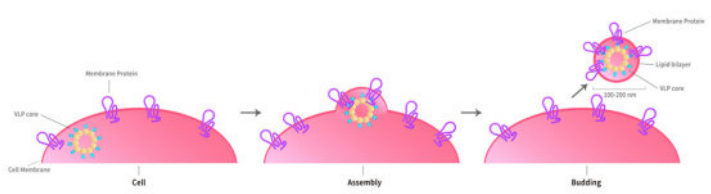
Glucagon R, GCGR,Glucagon receptor

Source

Human GCGR Full Length Protein (VLP)(GCR-H52P5) is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Asn 432 (Accession # P47871-1).
Predicted N-terminus: Asp

Molecular Characterization

Virus-like particles(VLPs) are formed by self-assembly of envelop/capsid proteins from viruses. Membrance Proteins can be constituted in-situ with VLPs produced from HEK293 cell cultures. These VLPs concentrate conformationally intact membrane proteins directly on the cell surface and produce soluble, high-concentration proteins perfect for immunization and antibody screening.



The VLPs provide the display of properly folded membrane proteins in their native cellular membrane in a compact size of 100~300 nm diameter (similar to the size of most viruses) making it optimal targets for dendritic cells in vivo and surface attachment for phage display.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Formulation

The VLPs are highly immunogenic, so the immunization strategy should be optimized (antigen dose, regimen and adjuvant).

Supplied as 0.2 μm filtered solution in PBS, Arginine, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

Storage

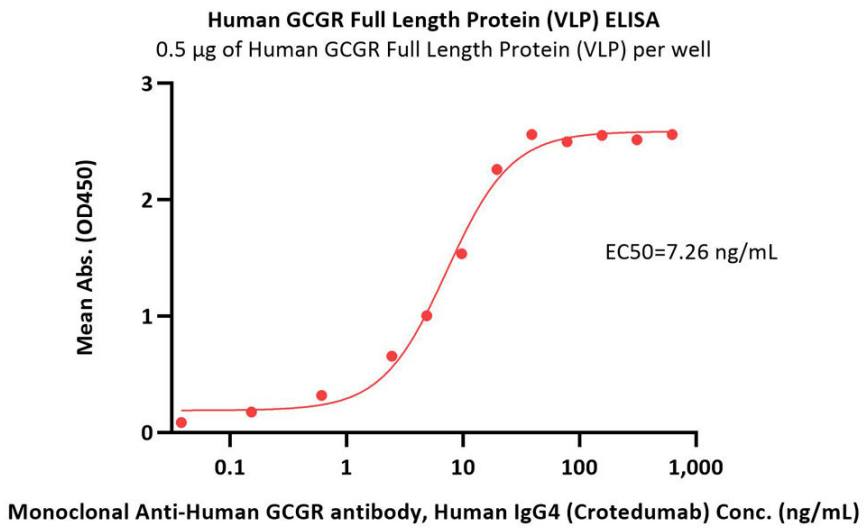
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

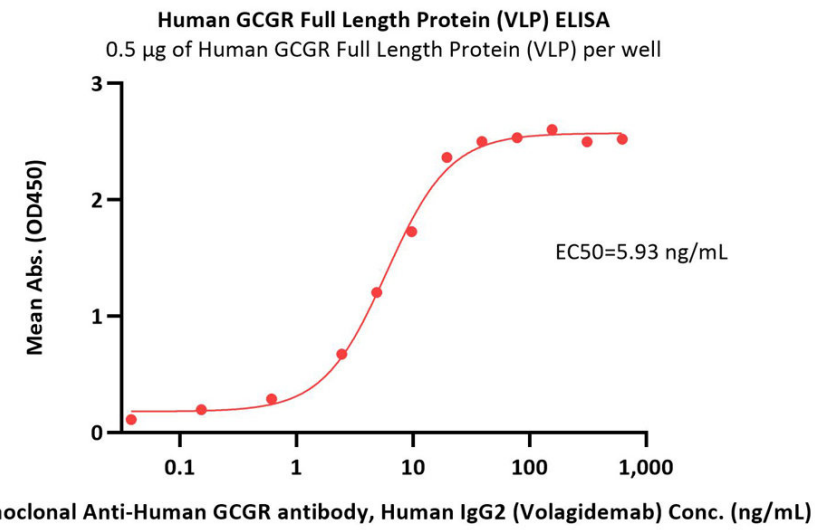
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

*The isotype control of empty/mock VLP (Cat. No. VLP-N5213) is sold separately and not included in protein, you can follow this link for product information.

Bioactivity-ELISA



Immobilized Human GCGR Full Length Protein (VLP) (Cat. No. GCR-H52P5) at 5 μg/mL (100 μL/well) can bind Monoclonal Anti-Human GCGR antibody, Human IgG4 (Crotedumab) with a linear range of 0.1-20 ng/mL (QC tested).



Immobilized Human GCGR Full Length Protein (VLP) (Cat. No. GCR-H52P5) at 5 μg/mL (100 μL/well) can bind Monoclonal Anti-Human GCGR antibody, Human IgG2 (Volagidemab) with a linear range of 0.1-20 ng/mL (Routinely tested).

Background

The protein encoded by this gene is a glucagon receptor that is important in controlling blood glucose levels. Defects in this gene are a cause of type 2 diabetes mellitus (T2DM) . The ever increasing prevalence of type 2 diabetes mellitus in the developed and developing nations calls for the introduction of new and more effective treatments. Glucagon receptor (GCGR) antagonists are highly validated in preclinical models of T2DM and thus have the potential to be developed as a new therapy.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.