

Synonym

GPRC5D,G-protein coupled receptor family C group 5 member D

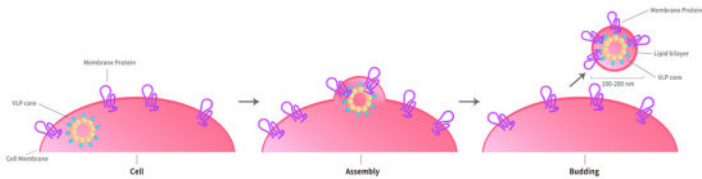
Source

Fluorescent Human GPRC5D Full Length Protein-VLP(GPD-HF2P7) is expressed from human 293 cells (HEK293). It contains AA Tyr 2 - Cys 300 (Accession # [Q9NZD1-2](#)).
Predicted N-terminus: Met

Molecular Characterization

This protein carries a GFP tag.

Virus-like particles(VLPs) are formed by self-assembly of capsid proteins from viruses. Membrane 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.

Conjugate

GFP

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 530 nm

*The isotype control of empty/mock VLP (Cat. No. [VLP-NF2P4](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

Purity

>95% as determined by SEC-HPLC.

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, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping

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

Storage

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

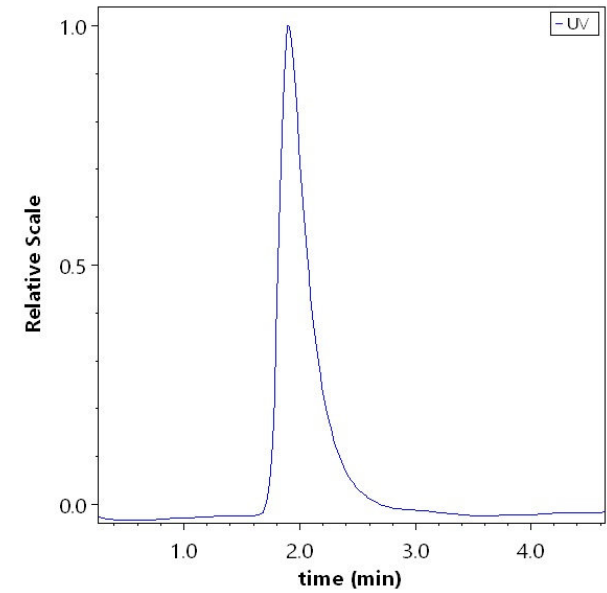
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

SEC-HPLC



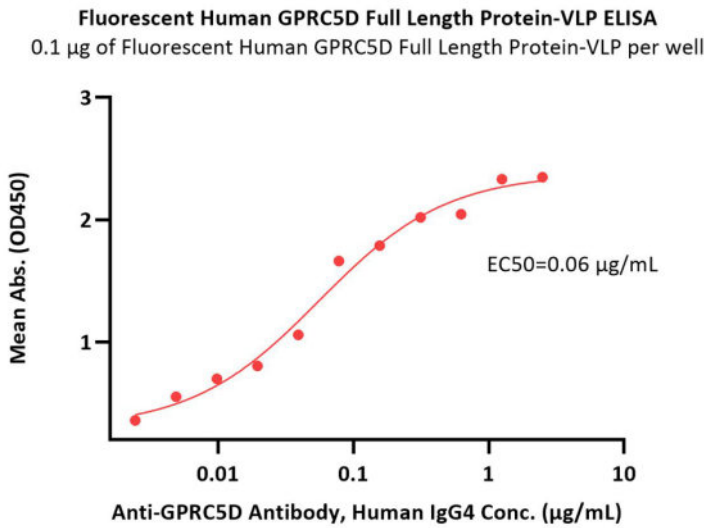
Fluorescent Human GPRC5D Full Length Protein (VLP)

Catalog # GPD-HF2P7



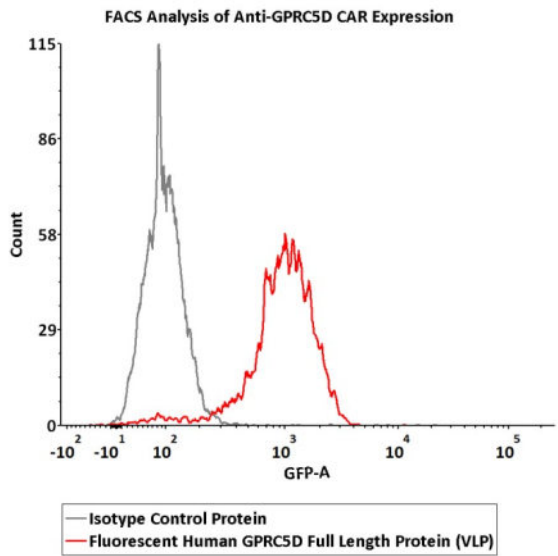
The purity of Fluorescent Human GPRC5D Full Length Protein-VLP (Cat. No. GPD-HF2P7) was greater than 95% as determined by SEC-HPLC.

Bioactivity-ELISA



Immobilized Fluorescent Human GPRC5D Full Length Protein-VLP (Cat. No. GPD-HF2P7) at 1 µg/mL (100 µL/well) can bind Anti-GPRC5D Antibody, Human IgG4 with a linear range of 0.002-0.313 µg/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-GPRC5D CAR-293 Cells were stained with 100 µL of 10 µg/mL of Fluorescent Human GPRC5D Full Length Protein (VLP) (Cat. No. GPD-



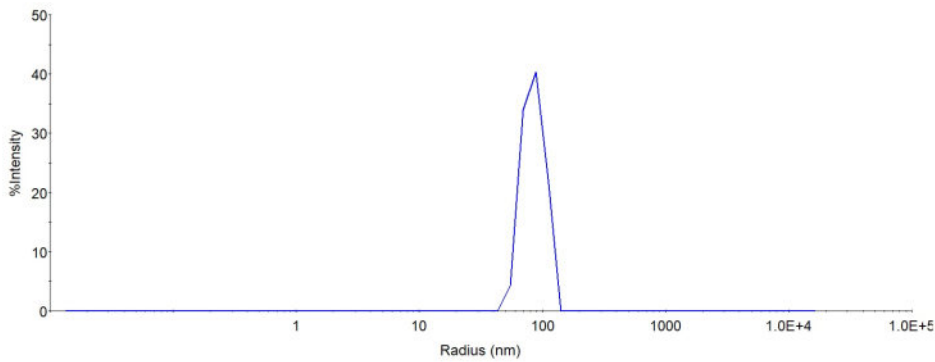
Fluorescent Human GPRC5D Full Length Protein (VLP)

Catalog # GPD-HF2P7



HF2P7) and isotype control protein respectively. GFP signal was used to evaluate the binding activity (QC tested).

Identity-DLS



The mean peak Radius of VLP is 65-85 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

Background

G-protein coupled receptor family C group 5 member D (GPRC5D) is a retinoic acid-inducible 40 kDa protein with seven transmembrane segments and a short N terminal extracellular region. Widely expressed in the peripheral system. Expression pattern is high in pancreas, medium in kidney, small intestine, spleen and testis, low in lung, colon, leukocyte, prostate and thymus and not detectable in brain, heart, liver, placenta, skeletal muscle and ovary.

