

# Human GPRC5D Full Length Protein (VLP)

Catalog # GPD-H52P7



BIOSYSTEMS  
**Acro**  
Surprise Inside!

## Synonym

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

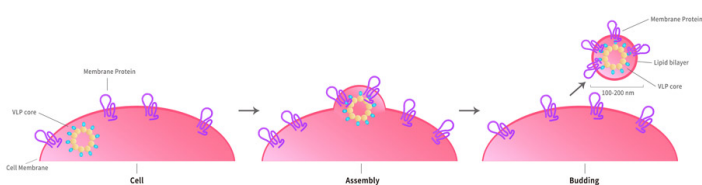
## Source

Human GPRC5D Full Length Protein (VLP)(GPD-H52P7) is expressed from human 293 cells (HEK293). It contains AA Tyr 2 - Val 345 (Accession # [Q9NZD1-1](#)).

Predicted N-terminus: Asp

## Molecular Characterization

Virus-like particles (VLPs) are formed by self-assembly of envelop/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.

## Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

\*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.

## 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 with dry ice, please inquire the shipping cost.*

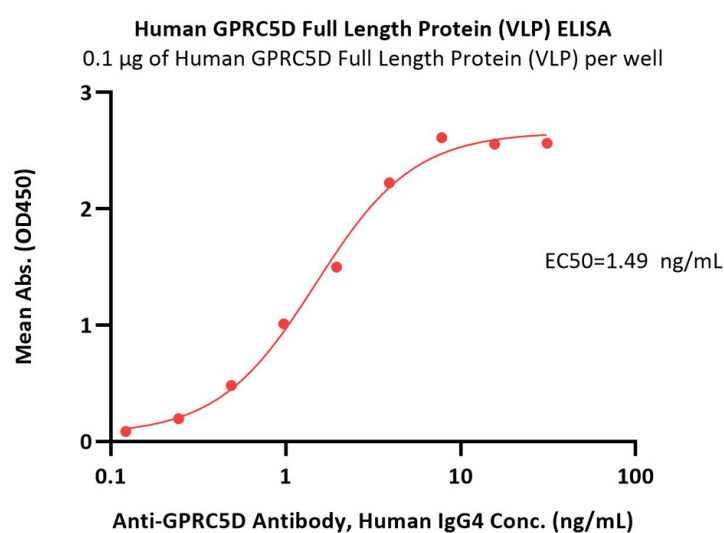
## Storage

*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.

## Bioactivity-ELISA



Immobilized Human GPRC5D Full Length Protein (VLP) (Cat. No. GPD-H52P7) at 1 µg/mL (100 µL/well) can bind Anti-GPRC5D Antibody, Human IgG4 with a linear range of 0.2-1 ng/mL (QC tested).

Discounts, Gifts,  
and more!



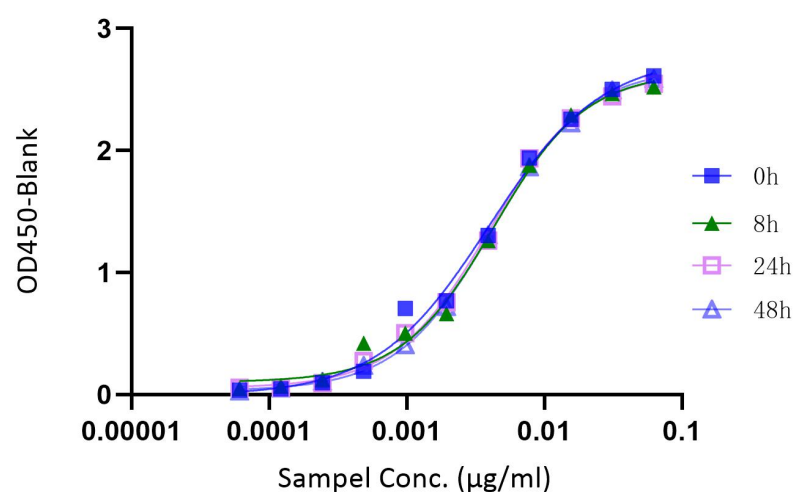
➤ [www.acrobiosystems.com](http://www.acrobiosystems.com)

4/21/2025



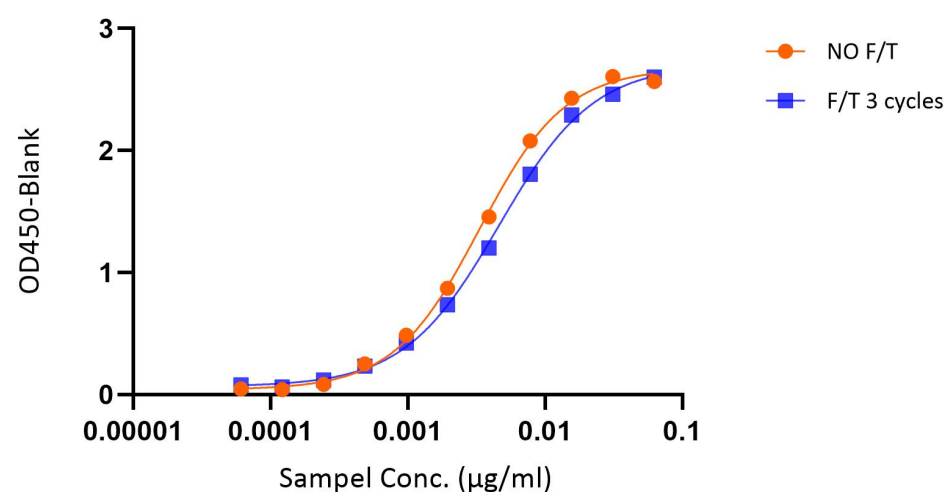
## Bioactivity-Stability

### 37°C - Accelerated Stability



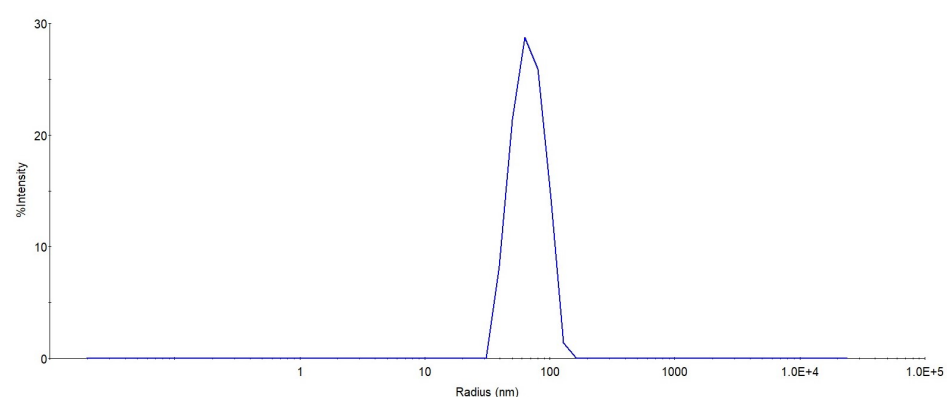
The accelerated stability based assay shows that Human GPRC5D Full Length Protein (VLP) (Cat. No. GPD-H52P7) is stable at 37°C for 48h.

### Freeze-thaw Stability



The freeze-thaw stability based assay shows that Human GPRC5D Full Length Protein (VLP) (Cat. No. GPD-H52P7) is stable after freeze-thaw 3 times.

## Identity-DLS



The mean peak Radius of VLP is 55-75 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.

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