



Application

- Immunization
- Affinity testing (SPR / BLI)
- Screening ([ELISA](#))

Synonym

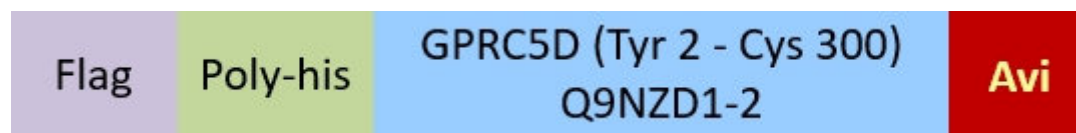
GPRC5D, G-protein coupled receptor family C group 5 member D

Source

Detergent Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag (GPD-H82D5) is expressed from human 293 cells (HEK293). It contains AA Tyr 2 - Cys 300 (Accession # [Q9NZD1-2](#)).

Predicted N-terminus: Asp

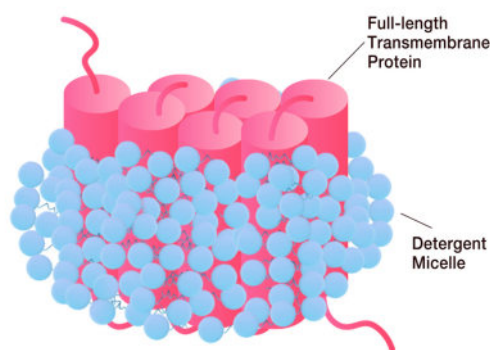
Molecular Characterization



This protein carries a Flag tag at the N-terminus, followed by a polyhistidine tag and an Avi tag (Avitag™) at the C-terminus. The protein has a calculated MW of 40.1 kDa.

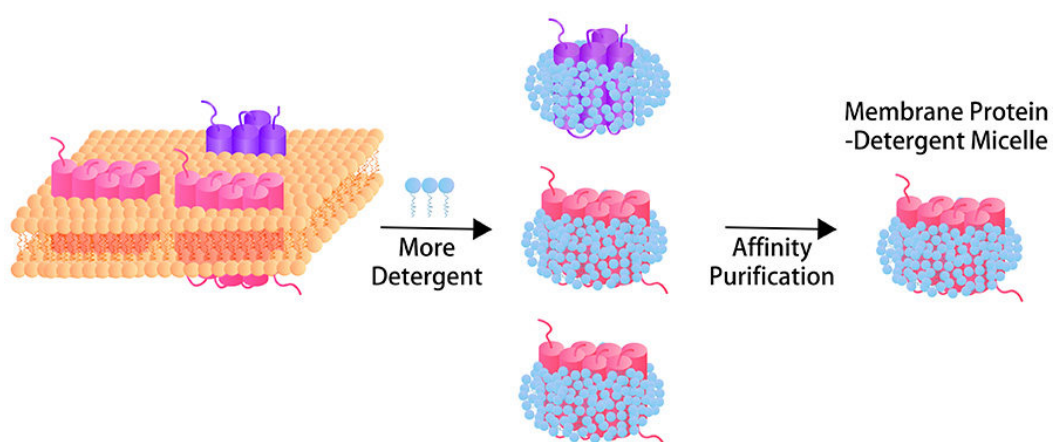
*The DDM/CHS buffer (Cat. No. [DC-11](#)) is sold separately and not included in protein, you can follow [the link](#) for product information.

• Structure



Each full-length transmembrane protein is encapsulated by detergent micelle.

• Synthesis Process



Through **mild detergent micelle extraction**, dedicated solubilization, and stringent affinity purification, we maximally retain the native transmembrane conformation of full-length transmembrane proteins throughout downstream purification. This workflow yields purified, detergent-solubilized proteins free of unrelated membrane impurities and exogenous scaffold proteins, with **exceptional purity, accurate quantitation**, and well-preserved biological activity—ideal for immunization, binding assays in antibody discovery and screening (ELISA) and affinity testing (SPR and BLI), etc.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

Formulation

This product is not suitable for cell based experiments due to cytotoxicity of DDM.

DDM and CHS are INDISPENSABLE to keep membrane protein soluble and active, under no circumstances should you remove DDM and CHS.

DDM/CHS buffer (DC-11) is sold separately and not included in protein, and please contact us if you need the buffer.

If glycerol is not compatible with your application, remove glycerol just before the immediate experiment, and NEVER store glycerol-free protein solution.

Supplied as 0.2 μm filtered solution in 50 mM HEPES, 150 mM NaCl, DDM, CHS, pH7.5 with glycerol 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:

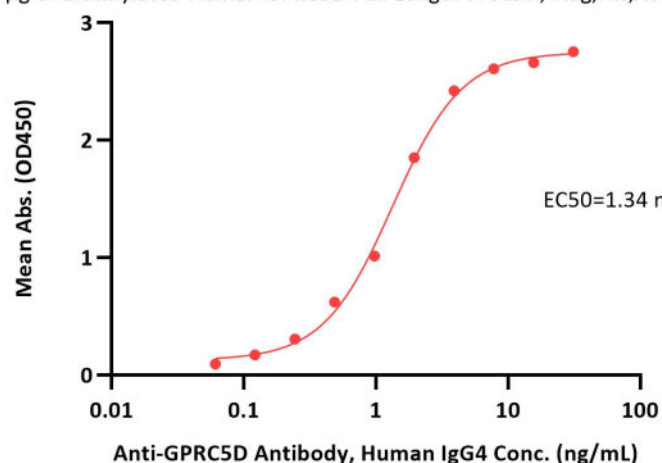
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

ACRO Quality Management System

- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

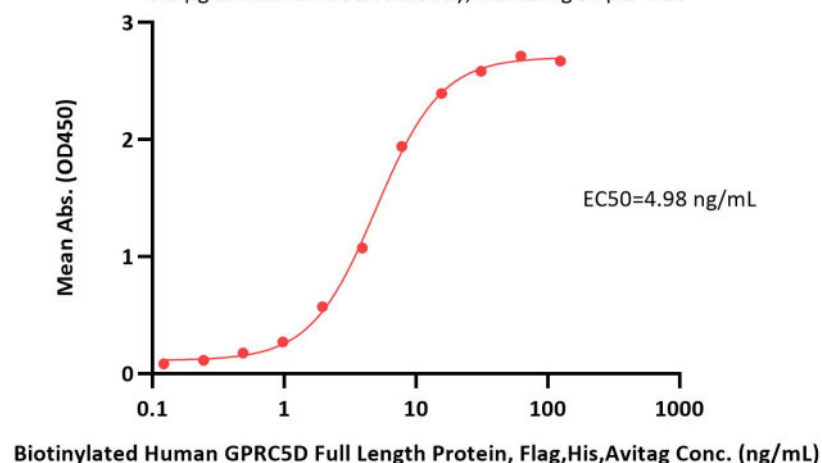
Bioactivity-ELISA

Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag ELISA
0.1 μg of Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag per well



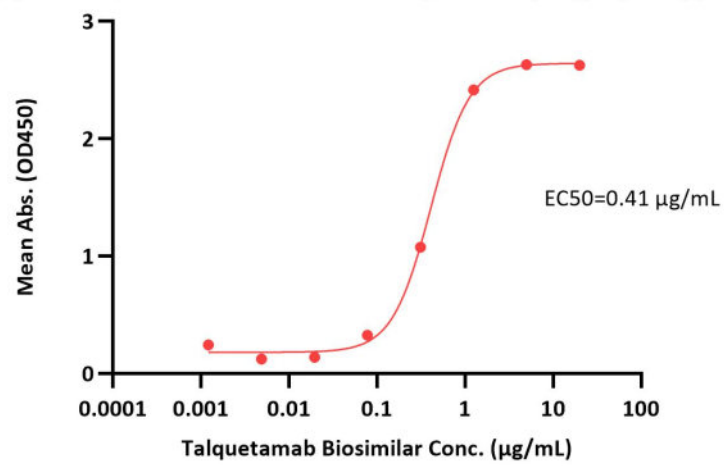
Immobilized Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag (Cat. No. GPD-H82D5) at 1 $\mu\text{g}/\text{mL}$ (100 $\mu\text{L}/\text{well}$) on streptavidin (Cat. No. STN-N5116) precoated (0.5 $\mu\text{g}/\text{well}$) plate can bind Anti-GPRC5D Antibody, Human IgG4 with a linear range of 0.06-4 ng/mL (QC tested).

Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag ELISA
0.5 μg of Anti-GPRC5D Antibody, Human IgG4 per well



Immobilized Anti-GPRC5D Antibody, Human IgG4 at 5 $\mu\text{g}/\text{mL}$ (100 $\mu\text{L}/\text{well}$) can bind Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag (Cat. No. GPD-H82D5) with a linear range of 0.1-16 ng/mL (Routinely tested).

Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag ELISA
1 µg of Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag per well



Immobilized Human CD3E&CD3D Heterodimer Protein (Cat. No. CDD-H52Wa) at 10 µg/mL, add Talquetamab Biosimilar and then add Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag (Cat. No. GPD-H82D5) at 10 µg/mL. Detection was performed using HRP-conjugated Streptavidin (Acro, Cat. No. STN-NH913) (Routinely tested).

Background

An orphan G protein-coupled receptor with highly restricted expression in malignant plasma cells and hard keratinized tissues (hair/nail). This profile mitigates off-tumor toxicity, establishing GPRC5D as a breakthrough target for bispecific antibodies and CAR-T therapies in relapsed/refractory multiple myeloma.

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