Catalog # GPD-H82D7



Synonym

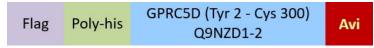
GPRC5D,G-protein coupled receptor family C group 5 member D

Source

Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag(GPD-H82D7) is expressed from human 293 cells (HEK293). It contains AA Tyr 2 -Cys 300 (Accession # <u>Q9NZD1-2</u>).

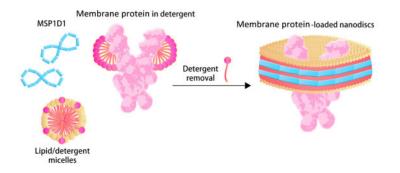
Predicted N-terminus: Asp

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.

Nanodiscs are a new class of model membranes that are being used to solubilize and study a range of integral membrane proteins and membrane-associated proteins. The Nanodisc bilayer is bounded by a membrane scaffold protein (MSP1D1) coat that confers enhanced stability and a narrow particle size distribution.



The nanodisc assembles from a mixture of full length membrane protein in detergent, phospholipid micelles and membrane scaffold protein(MSP1D1) upon removal of the detergent.

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.

Endotoxin

Less than 1.0 EU per μ g by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μ m filtered solution in 20 mM HEPES, 150 mM NaCl, pH7.5 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 3 months under sterile conditions.

*The isotype control of empty/mock nanodisc (Cat. No. APO-H81Q5) is sold separately and not included in protein, you can follow this link for product information.

Bioactivity-ELISA

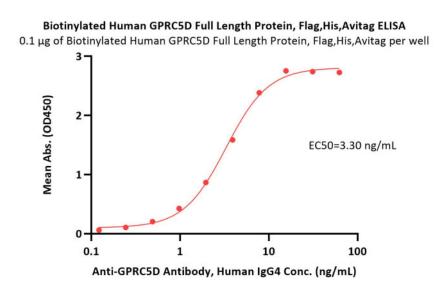


>>> www.acrobiosystems.com

1/15/2025

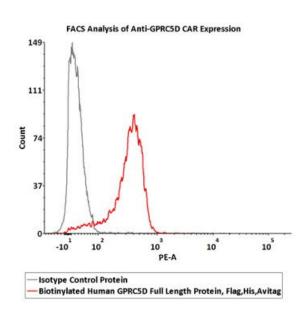


Catalog # GPD-H82D7



Immobilized Biotinylated Human GPRC5D Full Length Protein, Flag,His,Avitag (Cat. No. GPD-H82D7) at 1 μ g/mL (100 μ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μ g/well) plate can bind Anti-GPRC5D Antibody, Human IgG4 (Cat. No. AM312c) with a linear range of 0.1-8 ng/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-GPRC5D CAR-293 were stained with 100 μL of 3 μg/mL Biotinylated Human GPRC5D Full Length Protein, Flag,His,AvitagTM(Nanodisc)(Cat. No. GPD-H82D7) and isotype control protein respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).

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.

Clinical and Translational Updates



>>> www.acrobiosystems.com

1/15/2025