

# Biotinylated Human GPRC5D Protein-Nanodisc

Cat. No. GPR-HM45PB

## Description

Source	Recombinant Biotinylated Human GPRC5D Protein-Nanodisc is expressed from HEK293 with His tag and Avi tag at the C-terminus. It contains Met1-Val345.
Accession	Q9NZD1-1
Molecular Weight	The protein has a predicted MW of 42.10 kDa.

## Formulation and Storage

Formulation	Supplied as 0.22 $\mu$ m filtered solution in PBS (pH 7.4).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

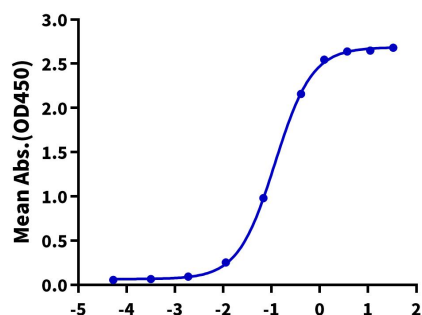
Chimeric antigen receptor (CAR) T cells, a type of cell-based immunotherapy, have shown some promising results in multiple myeloma, a bone marrow cancer. The orphan G protein-coupled receptor, class C group 5 member D (GPRC5D), normally expressed only in the hair follicle, Using quantitative immunofluorescence, we determined that GPRC5D protein is expressed on CD138 MM cells from primary marrow samples with a distribution that was similar to, but independent of, BCMA.

## Assay Data

### ELISA Data

#### Biotinylated Human GPRC5D (nanodisc), His Tag ELISA

0.2 $\mu$ g Anti-GPRC5D Antibody, hFc Tag Per Well



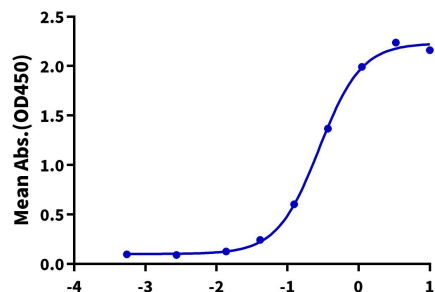
Immobilized Anti-GPRC5D Antibody, hFc Tag at 2 $\mu$ g/ml (100 $\mu$ l/well) on the plate. Dose response curve for Biotinylated Human GPRC5D Nanodisc, His Tag with the EC<sub>50</sub> of 0.12 $\mu$ g/ml determined by ELISA (QC Test).

Log Biotinylated Human GPRC5D (nanodisc), His Tag Conc. (μg/ml)

### ELISA Data

#### Biotinylated Human GPRC5D, His Tag ELISA

0.2 $\mu$ g Human CD3E&CD3D, His Tag Per Well

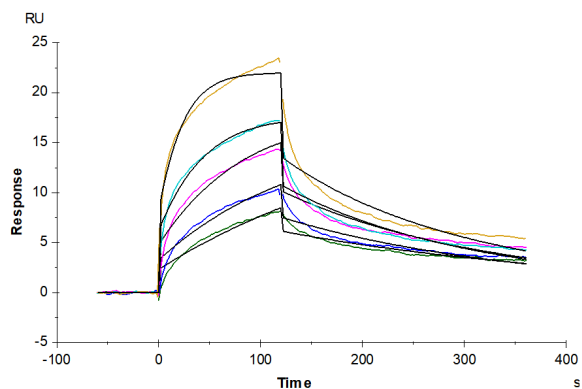


Immobilized Human CD3E&CD3D, His Tag at 2 $\mu$ g/ml (100 $\mu$ l/well) on the plate, add serial dilutions of Anti-Human CD3×GPRC5D Bispecific Antibody, hFc Tag and then add Biotinylated Human GPRC5D Nanodisc, His Tag at 5 $\mu$ g/ml. Detection was performed using HRP-conjugated streptavidin with the EC<sub>50</sub> of 0.28 $\mu$ g/ml determined by ELISA.

Log Anti-Human CD3 × GPRC5D Bispecific Antibody, hFc Tag Conc. (μg/ml)

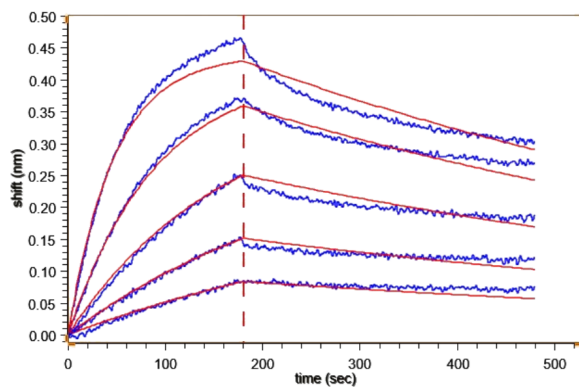
Assay Data

SPR Data



Biotinylated Human GPRC5D Nanodisc, His Tag captured on CM5 Chip via Streptavidin can bind Anti-GPRC5D Antibody with an affinity constant of 6.30 nM as determined in SPR assay (Biacore T200).

BLI Data



Loaded Biotinylated Human GPRC5D Nanodisc, His Tag on SA-Biosensor, can bind Anti-GPRC5D Antibody with an affinity constant of 1.16 nM as determined in BLI assay (Gator Prime).