

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.<br>It contains Met1-Val345. |
| Accession        | Q9NZD1-1                                                                                                                                                |
| Molecular Weight | The protein has a predicted MW of 42.10 kDa.                                                                                                            |
| Endotoxin        | Less than 1EU per µg by the LAL method.                                                                                                                 |

| Formulation and Storage |                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formulation             | Supplied as 0.22 µm filtered solution in PBS (pH 7.4). Notice: Not recommended for flow cytometry in mammalian cells.                                                           |
| Storage                 | Valid for 6 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. |

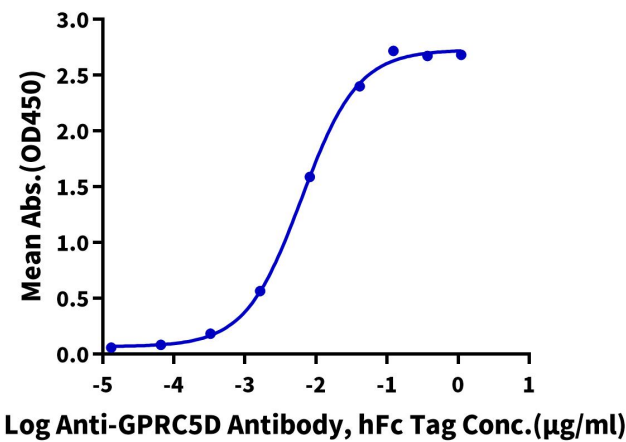
| Background                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 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

0.5µg Biotinylated Human GPRC5D Nanodisc, His Tag Per Well

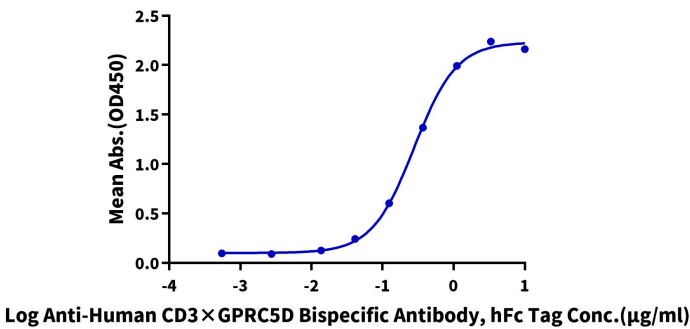


Immobilized Biotinylated Human GPRC5D Nanodisc, His Tag at 5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-GPRC5D Antibody, hFc Tag with the EC50 of 6.3ng/ml determined by ELISA (QC Test).

ELISA Data

Biotinylated Human GPRC5D, His Tag ELISA

0.2µg Human CD3E&CD3D, His Tag Per Well



Immobilized Human CD3E&CD3D, His Tag at 2µg/ml (100µl/well) on the plate, add serial dilutions of Anti-Human CD3 x GPRC5D Bispecific Antibody, hFc Tag and then add Biotinylated Human GPRC5D Nanodisc, His Tag at 5µg/ml. Detection was performed using HRP-conjugated streptavidin with the EC50 of 0.28µg/ml determined by ELISA.

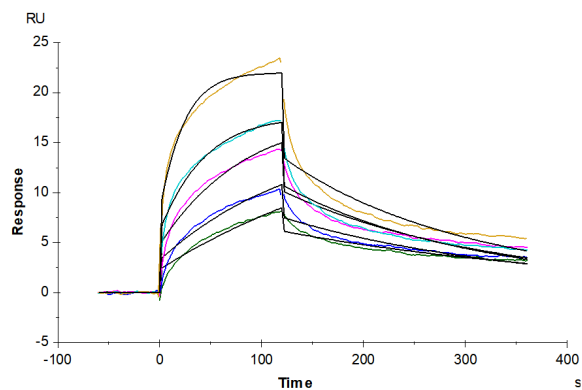
SPR Data

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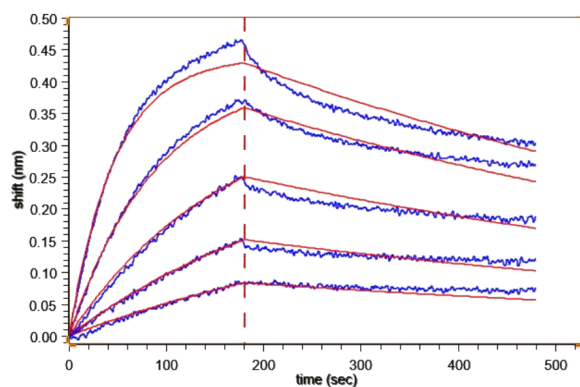


### Assay Data



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).