

Biotinylated Human GPRC5D Nanodisc

Cat. No. GPR-HM45PB



Description	
Source	Recombinant Biotinylated Human GPRC5D 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.
Endotoxin	Less than 1 EU 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.

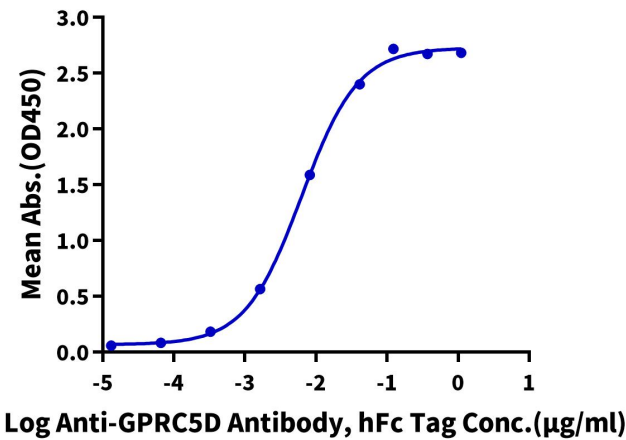
Background	
Chimeric antigen receptor (CAR) T cells, a type of cell-based immunotherapy, have shown some promising results in multiple myeloma, a bone marrow cancer. The orphan G protein-coupled receptor, class C group 5 member D (GPRC5D), normally expressed only in the hair follicle, Using quantitative 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

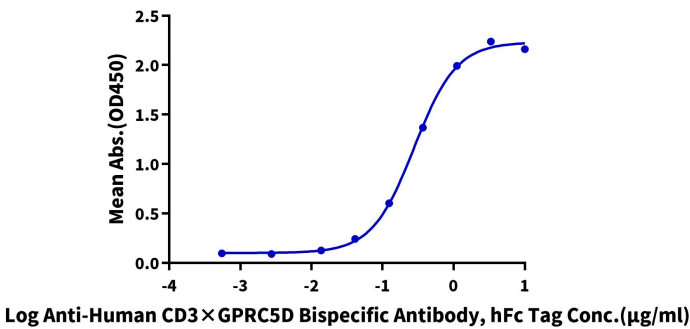


Immobilized Biotinylated Human GPRC5D Nanodisc, His Tag at 5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-GPRC5D Antibody, hFc Tag with the EC50 of 6.3ng/ml determined by ELISA (QC Test).

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×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.

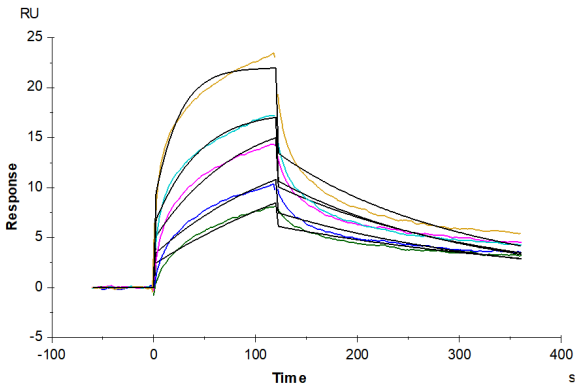
SPR Data

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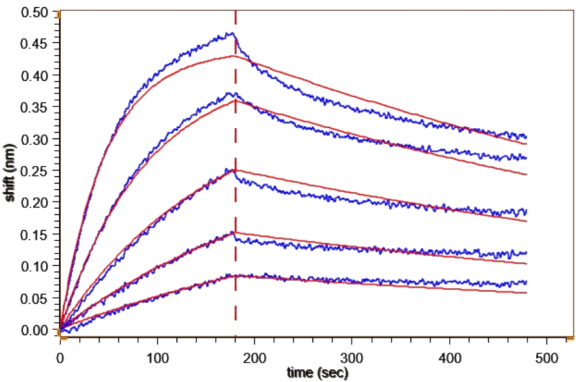


Assay Data



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).