

# Biotinylated Human GPRC5D Protein-VLP

Cat. No. GPR-HM05PB

## Description

<b>Source</b>	Recombinant Biotinylated Human GPRC5D Protein-VLP is expressed from HEK293. It contains Met1-Val345.
<b>Accession</b>	Q9NZD1-1
<b>Molecular Weight</b>	The target protein has a predicted MW of 39.6 kDa.
<b>Endotoxin</b>	Less than 1EU per $\mu$ l by the LAL method.
<b>Purity</b>	> 95% as determined by HPLC

## Formulation and Storage

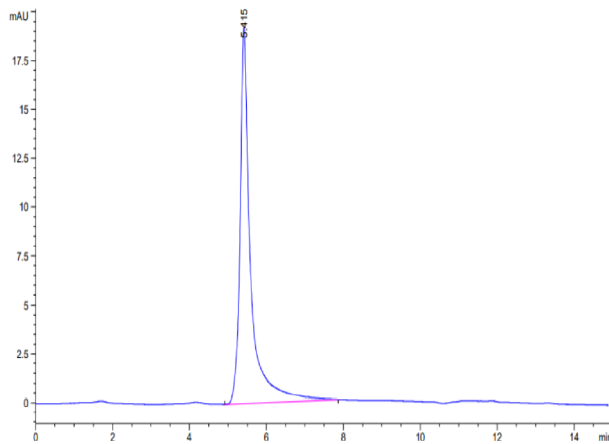
<b>Formulation</b>	Supplied as 0.22 $\mu$ m filtered solution in PBS, 300mM L-Arginine (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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.

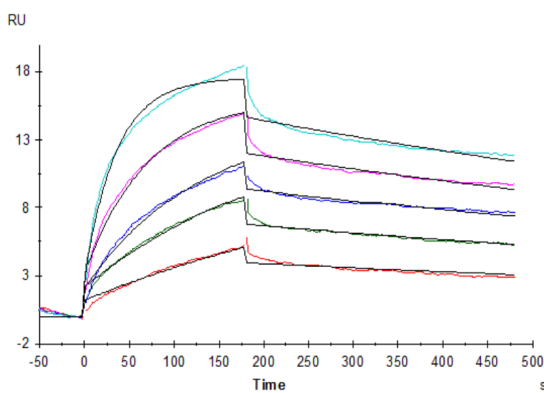
## Assay Data

### SEC-HPLC



The purity of Biotinylated Human GPRC5D VLP is greater than 95% as determined by SEC-HPLC.

### SPR Data



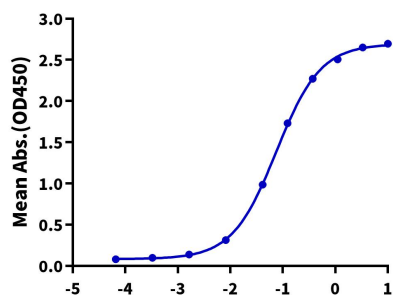
Biotinylated Human GPRC5D VLP captured on SA Chip can bind Anti-GPRC5D antibody, hFc Tag with an affinity constant of 0.30 nM as determined in SPR assay (Biacore T200) (QC Test).

Assay Data

ELISA Data

**Biotinylated Human GPRC5D VLP ELISA**

0.1µg Human CD3E&CD3D, hFc Tag Per Well



Immobilized Human CD3E&CD3D, hFc Tag at 1µg/ml (100µl/well) on the plate. Add serial dilutions of Anti-CD3xGPRC5D Bispecific Antibody, hFc Tag in 10% Human Serum and then add various dilution ratio of Biotinylated Human GPRC5D VLP. Detection was performed using HRP-conjugated streptavidin with the EC50 of 75.5ng/ml determined by ELISA.

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