

Biotinylated Human GPRC5D Protein-VLP

Cat. No. GPR-HM05PB

Description

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

Formulation and Storage

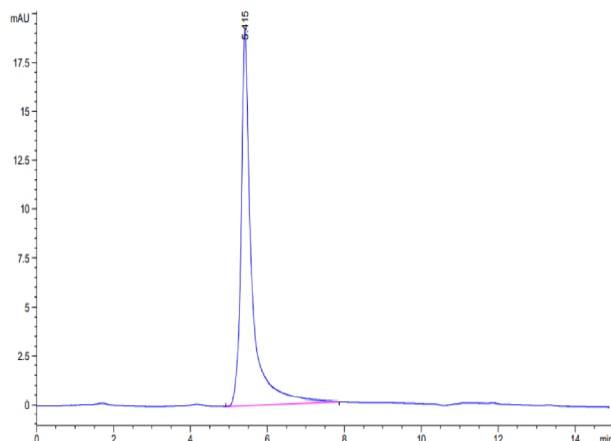
Formulation	Supplied as 0.22 μ m filtered solution in PBS, 300mM L-Arginine (pH 7.4).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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

SEC-HPLC

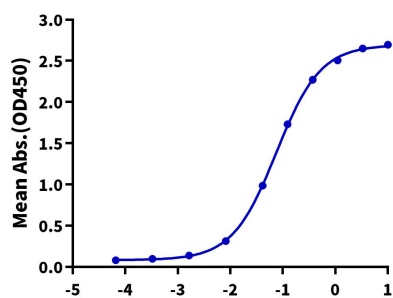


The purity of Biotinylated Human GPRC5D VLP is greater than 95% as determined by SEC-HPLC.

ELISA Data

Biotinylated Human GPRC5D VLP ELISA

0.1 μ g Human CD3E&CD3D, hFc Tag Per Well



Immobilized Human CD3E&CD3D, hFc Tag at 1 μ g/ml (100 μ l/well) on the plate. Add serial dilutions of Anti-CD3 x GPRC5D 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. (μ g/ml)

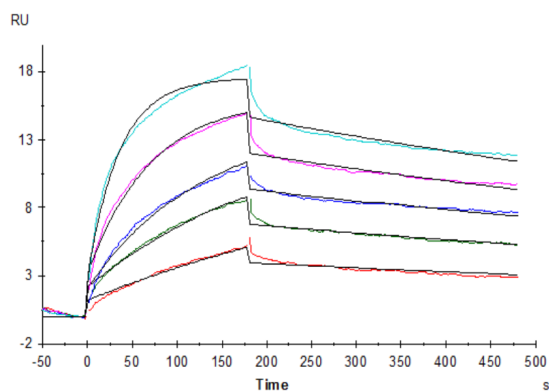
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Assay Data

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).