

### Synonym

BFPP, BPPR, GPR56, TM7LN4, TM7XN1

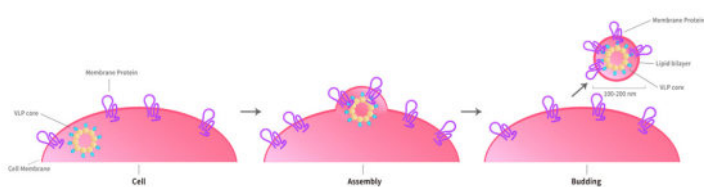
### Source

Human GPR56 Full Length Protein-VLP(GP6-H52P7) is expressed from human 293 cells (HEK293). It contains AA Arg 26 - Ile 693 (Accession # [Q9Y653-1](#)).

Predicted N-terminus: Arg 26

### Molecular Characterization

Virus-like particles(VLPs) are formed by self-assembly of envelop/capsid proteins from viruses. Membrane Proteins can be constituted in-situ with VLPs produced from HEK293 cell cultures. These VLPs concentrate conformationally intact membrane proteins directly on the cell surface and produce soluble, high-concentration proteins perfect for immunization and antibody screening.



The VLPs provide the display of properly folded membrane proteins in their native cellular membrane in a compact size of 100~300 nm diameter (similar to the size of most viruses) making it optimal targets for dendritic cells in vivo and surface attachment for phage display.

### Endotoxin

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

### Formulation

*The VLPs are highly immunogenic, so the immunization strategy should be optimized (antigen dose, regimen and adjuvant).*

Supplied as 0.2  $\mu\text{m}$  filtered solution in PBS, Arginine, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Shipping

*This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.*

### Storage

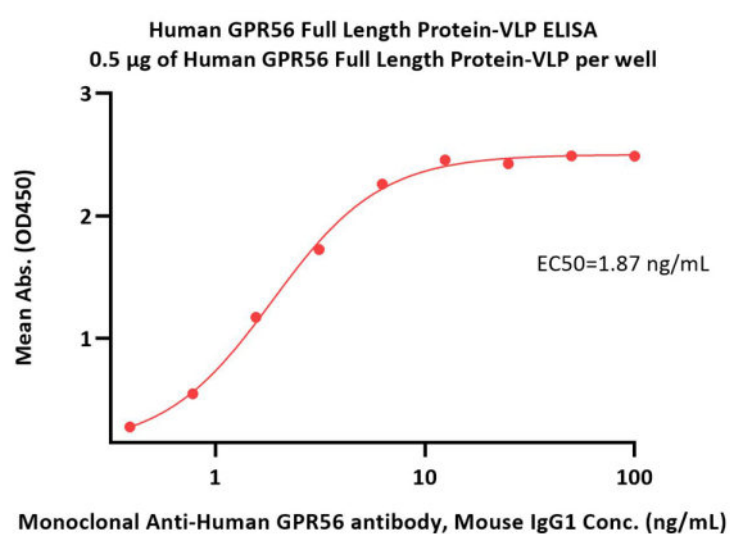
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- The product MUST be stored at  $-70^{\circ}\text{C}$  or lower upon receipt;
- $-70^{\circ}\text{C}$  for 12 months under sterile conditions.

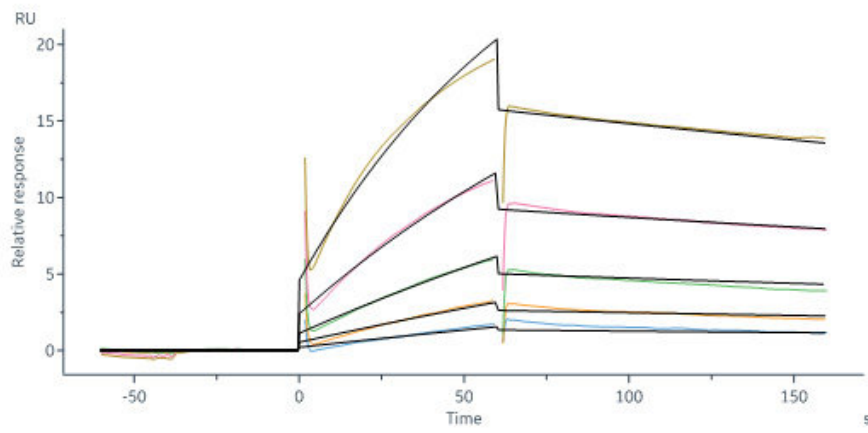
\*The isotype control of empty/mock VLP (Cat. No. [VLP-N5213](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

### Bioactivity-ELISA



Immobilized Human GPR56 Full Length Protein-VLP (Cat. No. GP6-H52P7) at 5  $\mu\text{g}/\text{mL}$  (100  $\mu\text{L}/\text{well}$ ) can bind Monoclonal Anti-Human GPR56 antibody, Mouse IgG1 with a linear range of 0.4-6 ng/mL (QC tested).

### Bioactivity-SPR



Human GPR56 Full Length Protein-VLP (Cat. No. GP6-H52P7) captured on CM5 Chip via Anti-Human GPR56 antibody can bind Anti-Human GPR56 with an affinity constant of 15.7 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

## Background

This gene encodes a member of the G protein-coupled receptor family and regulates brain cortical patterning. The encoded protein binds specifically to transglutaminase 2, a component of tissue and tumor stroma implicated as an inhibitor of tumor progression. Mutations in this gene are associated with a brain malformation known as bilateral frontoparietal polymicrogyria. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.