

Datasheet for ABIN7448165

Glypican 3 Protein-VLP (GPC3) (AA 510-554)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	Glypican 3 (GPC3)
Protein Characteristics:	AA 510-554
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	VLP
Biological Activity:	Active
Application:	Immunogen (Imm), ELISA, Functional Studies (Func), Surface Plasmon Resonance (SPR)

Product Details

Purpose:	Human GPC3 Protein-VLP
Sequence:	Gly510-Asn554
Characteristics:	Recombinant Human GPC3 Protein-VLP is expressed from E.coli. It contains Gly510-Asn554.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1EU per µg by the LAL method.
Biological Activity Comment:	Immobilized Human GPC3 VLP at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-GPC3 Antibody, hFc Tag with the EC50 of 20.2ng/ml determined by ELISA.

Target Details

Target:	Glypican 3 (GPC3)
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Target Details

Alternative Name:	GPC3 (GPC3 Products)
Background:	Glypican-3 is a protein ,which is encoded by the GPC3 gene in humans.The protein core of GPC3 consists of two subunits, where the N-terminal subunit has a size of ~40 kDa and the C-terminal subunit is ~30 kDa.Glypican 3 is a potential therapeutic target for treating liver cancer and other cancers. Several therapeutic anti-GPC3 antibodies have been developed.
Molecular Weight:	14 kDa.
Pathways:	Glycosaminoglycan Metabolic Process

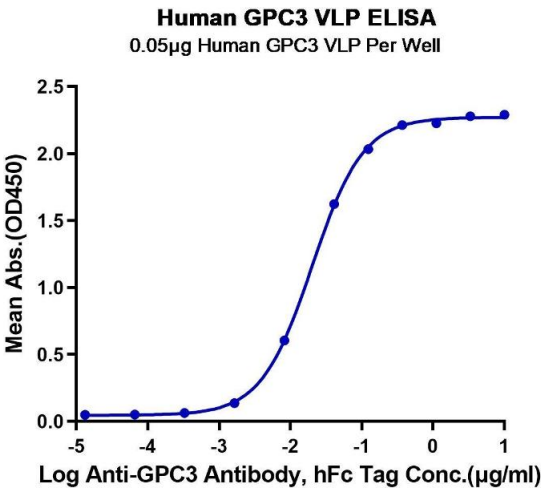
Application Details

Application Notes:	<ul style="list-style-type: none">• Antibody Discovery: Immunization, Screening, Functional Characterization• Affinity determination: ELISA, SPR• In vivo pharmacokinetic analysis• CMC method development• CAR-T Positive Rate Detection• Blood sample determination: ELISA
Comment:	<p>Virus-like particles (VLPs) are formed from the outer capsid protein of a virus and are tiny nanoparticles formed by the automatic assembly of one or more capsid proteins. VLPs do not contain viral infectious genomes, so they are relatively safe during production operations. The SAMS™ protein engineering platform has been used to express a series of biotinylated, non-biotinylated, and fluorescently-labeled VLP-displayed antigens. They are suitable for SPR, ELISA, CAR-T positive rate detection, and other experimental scenarios.</p> <p>Virus-Like Particles (VLPs) are highly immunogenic, meaning that they can elicit a strong immune response in the host. VLPs are recognized by the immune system and are taken up by antigen-presenting cells (APCs) such as dendritic cells. Once taken up by APCs, VLPs are processed and presented to T cells, which can trigger the activation of B cells to produce antibodies against the displayed antigen. Because VLPs resemble the structure and composition of native viruses, they are highly effective at inducing both humoral and cellular immune responses.</p> <p>Generally, VLPs range in size from approximately 20 to 200 nanometers (nm). Compared to a cell-based immunization approach, their smaller size can optimize the immune response to target the specific antigen displayed on the surface of the engineered VLPs.</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Supplied as 0.22µm filtered solution in 20 mM HEPES, 500 mM NaCl, 10 % Glycerol, 0.1 % Tween20 (pH 7.7).
Storage:	-80 °C
Storage Comment:	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.
Expiry Date:	12 months

Images



ELISA

Image 1. Immobilized Human GPC3 VLP at 0.5 µg/mL (100 µL/Well) on the plate. Dose response curve for Anti-GPC3 Antibody, hFc Tag with the EC50 of 20.2 ng/mL determined by ELISA.