

Datasheet for ABIN7448173
TM4SF1 Protein-VLP (AA 1-202)[Go to Product page](#)**2** Images

Overview

Quantity:	100 µg
Target:	TM4SF1
Protein Characteristics:	AA 1-202
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	VLP
Biological Activity:	Active
Application:	ELISA, Functional Studies (Func), Immunogen (Imm), Surface Plasmon Resonance (SPR)

Product Details

Purpose:	Human TM4SF1 Protein-VLP
Sequence:	Met1-Cys202
Characteristics:	Recombinant Human TM4SF1 Protein-VLP is expressed from HEK293. It contains Met1-Cys202.
Purity:	> 95 % as determined by HPLC
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1EU per µg by the LAL method.
Biological Activity Comment:	Immobilized Human TM4SF1 VLP at 5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-TM4SF1 Antibody, hFc Tag with the EC50 of 6.3ng/ml determined by ELISA.

Target Details

Target:	TM4SF1
Alternative Name:	TM4SF1 (TM4SF1 Products)
Background:	Transmembrane-4-L-six-family-1(TM4SF1), a four-transmembrane L6 family member, is highly expressed in various pancreatic cancer cell lines and promotes cancer cells metastasis. It is upregulated in several epithelial cancers and is closely associated with poor prognosis.
Molecular Weight:	21.64 kDa.
UniProt:	P30408

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
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Comment: 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.

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.

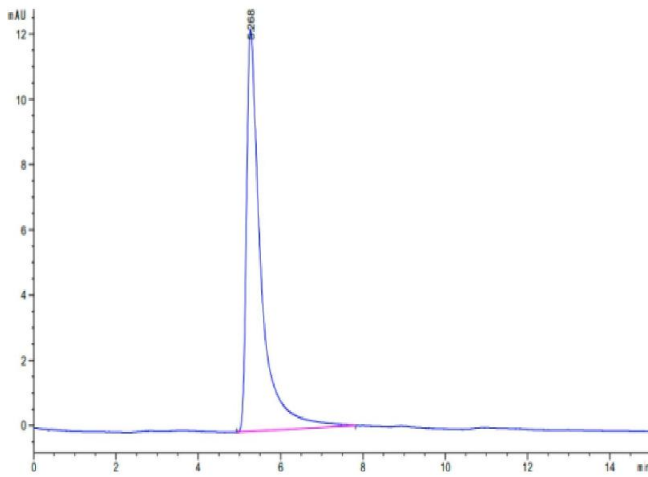
Generally, VLPs range in size from approximately 20 to 200 nanometers (nm). Compared to a cell-based immunization approach, their smaller size can optimize the immune response to target the specific antigen displayed on the surface of the engineered VLPs.

Restrictions:	For Research Use only
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Handling

Format:	Liquid
Buffer:	Supplied as 0.22µm filtered solution in PBS (pH 7.4). Notice: If you need it for immunization, Do Not use any adjuvant.
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

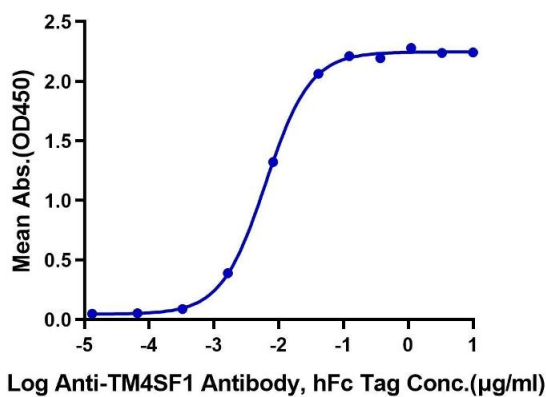
Images



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 1. The purity of Human TM4SF1 VLP is greater than 95 % as determined by SEC-HPLC.

Human TM4SF1 VLP ELISA
0.5µg Human TM4SF1 VLP Per Well



ELISA

Image 2. Immobilized Human TM4SF1 VLP at 5 µg/mL (100 µL/Well) on the plate. Dose response curve for Anti-TM4SF1 Antibody, hFc Tag with the EC50 of 6.3 ng/mL determined by ELISA.