

Human STEAP1 Full Length Protein (VLP)

Catalog # ST1-H52P3



BIOSYSTEMS
Acro

Application

- Immunization
- Cell based assay (FACS or functional assay)
- Screening ([ELISA](#))

Synonyms

STEAP1, PRSS24, STEAP

Source

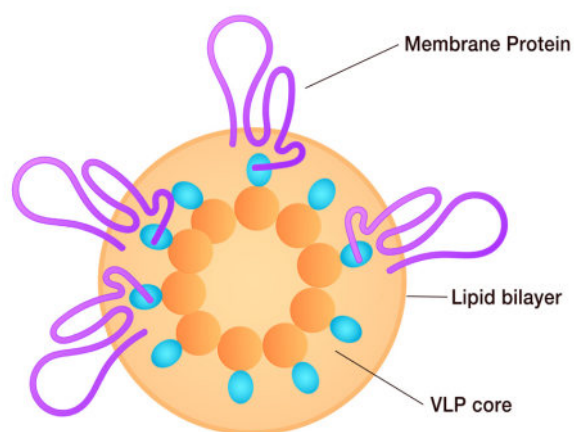
Human STEAP1 Full Length Protein (VLP) (ST1-H52P3) is expressed from human 293 cells (HEK293). It contains AA Glu 2 - Leu 339 (Accession # [Q9UHE8-1](#)).

Predicted N-terminus: Met

Molecular Characterization

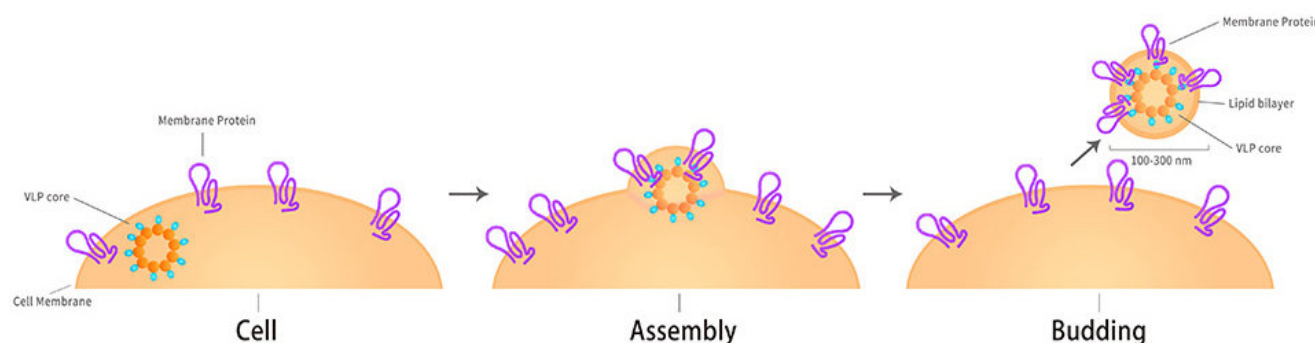
*The isotype control of empty/mock VLP (Cat. No. [VLP-N5213](#)) is sold separately and not included in protein, you can follow [the link](#) for product information.

• Structure



Virus-like particles (VLPs) are protein particles that mimic the shape of viruses but lack a viral genome, and incorporating transmembrane proteins on the external surface.

• Synthesis Process



Envelope virus-like particles (eVLPs) are produced by **co-expressing target membrane proteins with viral structural proteins in mammalian cells**, enabling native embedding of membrane proteins into the lipid bilayer during VLP budding. This approach preserves authentic conformation, post-translational modifications, and orientation, while creating a completely detergent-free environment with repetitive multivalent display and **strong immunogenicity** making them ideal for immunization, binding assays in antibody discovery and screening (ELISA), and cell-based assays such as FACS, etc.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Formulation

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

Supplied as 0.2 µm filtered solution in PBS, Arginine, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

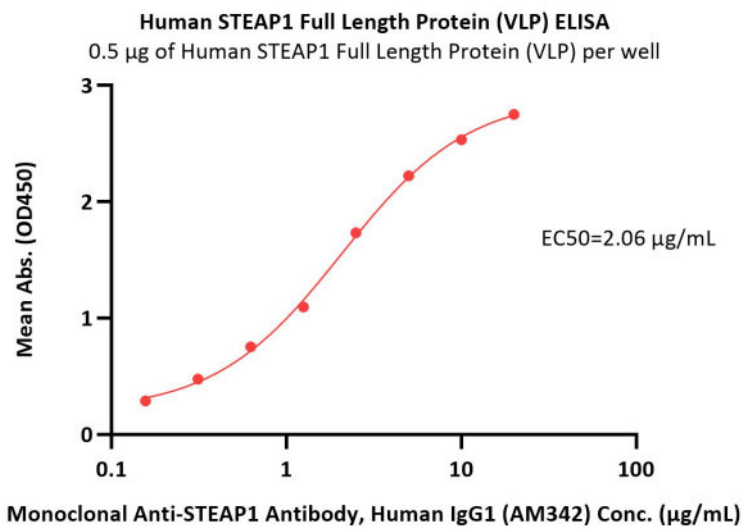
- The product **MUST** be stored at -70°C or lower upon receipt;

- -70°C for 12 months under sterile conditions.

ACRO Quality Management System

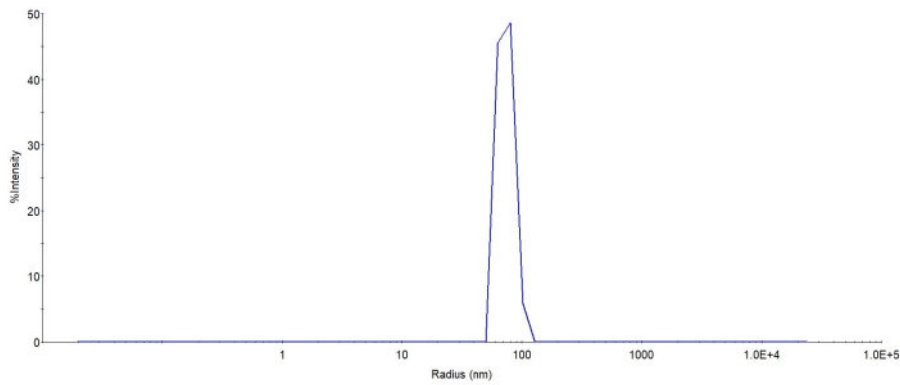
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

Bioactivity-ELISA



Immobilized Human STEAP1 Full Length Protein (VLP) (Cat. No. ST1-H52P3) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-STEAP1 Antibody, Human IgG1 (AM342) with a linear range of 0.156-5 µg/mL (QC tested).

Identity-DLS



The mean peak Radius of VLP is 60-80 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

Background

A transmembrane metalloredutase highly overexpressed in prostate cancer with minimal normal tissue distribution. It facilitates cellular iron and copper reduction. Its tumor-selective profile makes it a compelling target for antibody-drug conjugates and T-cell engagers in metastatic prostate cancer.



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