

Human P2X7 Full Length Protein (VLP)

Catalog # P27-H52P3



BIOSYSTEMS
Acro

Application

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

Synonyms

P2X7

Source

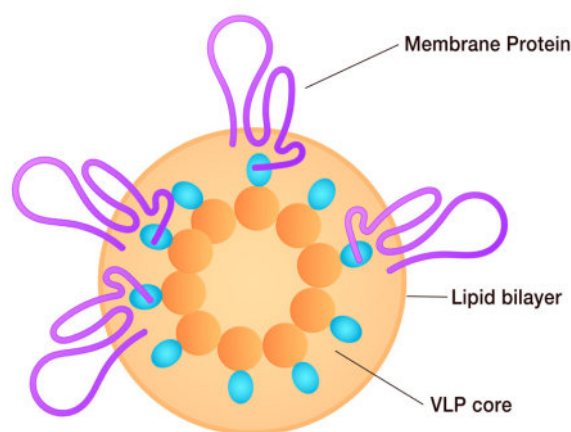
Human P2X7 Full Length Protein (VLP) (P27-H52P3) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Tyr 595 (Accession # [Q99572-1](#)).

Predicted N-terminus: Met

Molecular Characterization

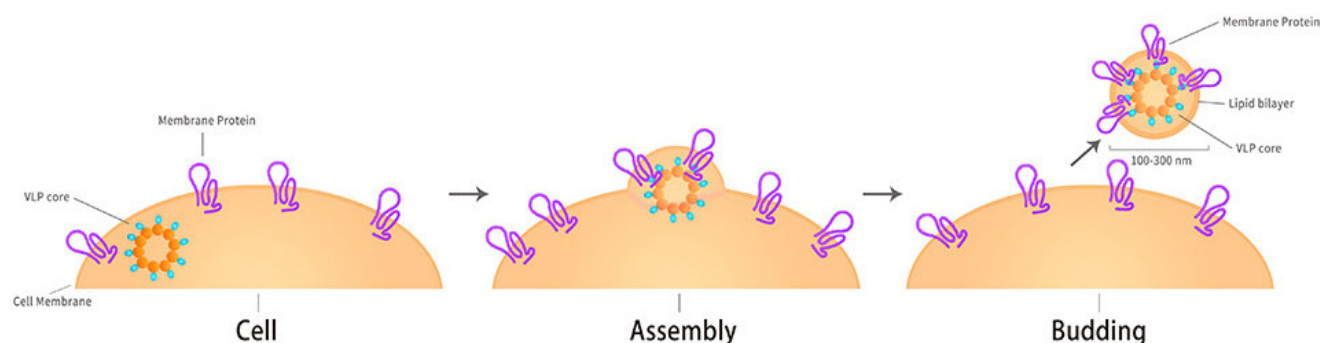
*The isotype control of empty/mock VLP (Cat. No. [VLP-N5213](#)) is sold separately and not included in protein, you can follow [the link](#) for product information.

• 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, 0.2 M 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:

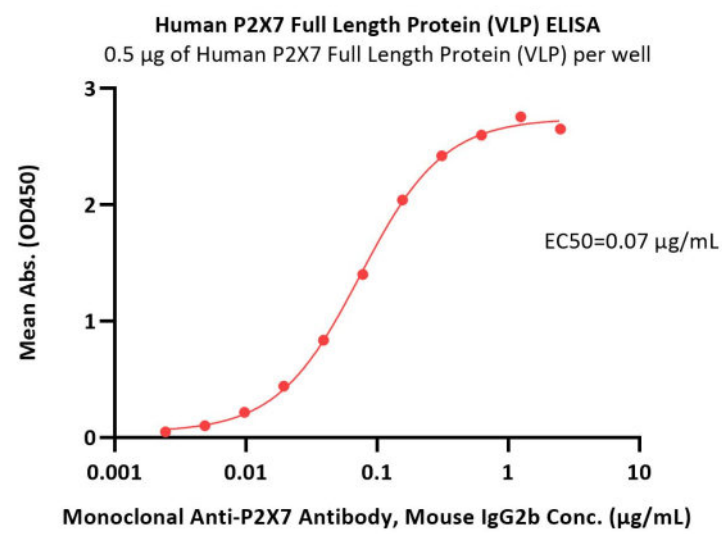
- The product **MUST** be stored at -70°C or lower upon receipt;

- -70°C for 3 months under sterile conditions.

ACRO Quality Management System

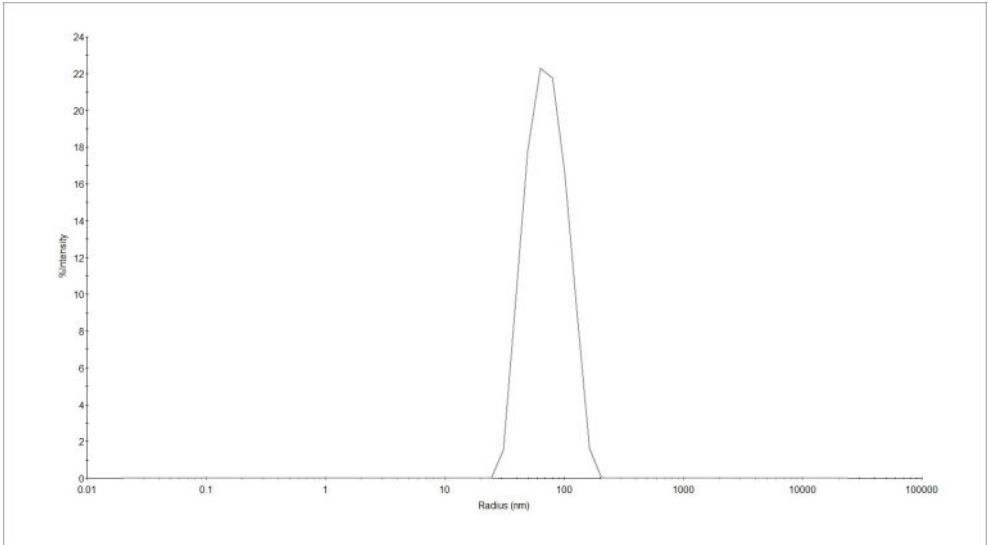
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

Bioactivity-ELISA



Immobilized Human P2X7 Full Length Protein (VLP) (Cat. No. P27-H52P3) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-P2X7 Antibody, Mouse IgG2b with a linear range of 0.002-0.156 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

P2X7 is a ligand-gated ion channel driven by high concentrations of extracellular ATP under pathological conditions. Extensively expressed on immune and microglial cells, it acts as a critical upstream switch to activate the NLRP3 inflammasome, making it a premier therapeutic target for neuroinflammation, depression, and chronic inflammatory disorders.



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