Mouse CXCR3 Full Length Protein (VLP)

Catalog # CX3-M52P7

Synonym

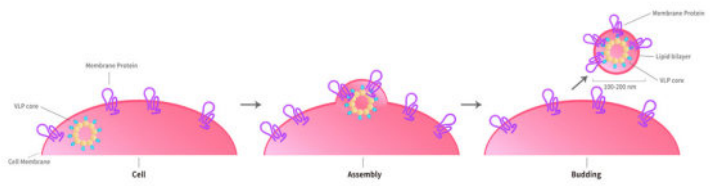
CD182, CD183, CKR-L2, CMKAR3, GPR9, IP10-R, Mig-R, MigR

Source

Mouse CXCR3 Full Length Protein (VLP)(CX3-M52P7) is expressed from human 293 cells (HEK293). It contains AA Tyr 2 - Leu 367 (Accession # O88410).
Predicted N-terminus: Asp

Molecular Characterization

Virus-like particles(VLPs) are formed by self-assembly of envelop/capsid proteins from viruses. Membrance 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 μg 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 μm 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 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°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

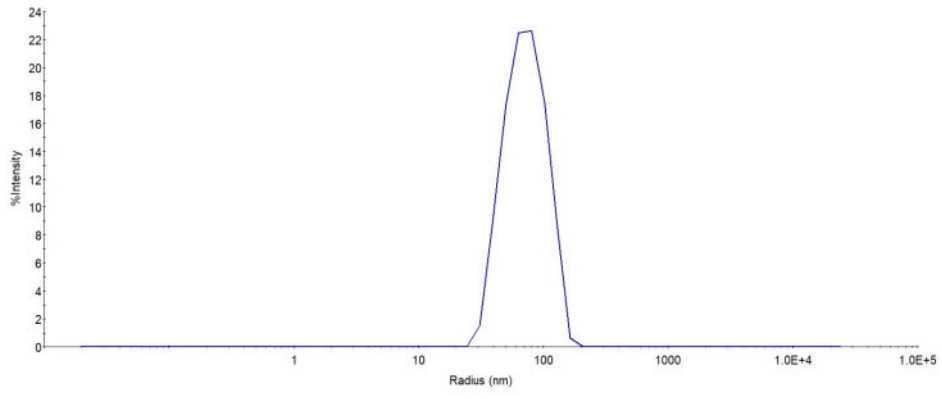
*The isotype control of empty/mock VLP (Cat. No. VLP-N5213) is sold separately and not included in protein, you can follow this link for product information.

Bioactivity-ELISA


CXCR3 ELISA

Immobilized Mouse CXCR3 Full Length Protein (VLP) (Cat. No. CX3-M52P7) at 2 μg/mL (100 μL/well) can bind Anti-CXCR3 chimeric antibody with a linear range of 1-31 ng/mL (Routinely tested).

Identity-DLS



The mean peak Radius of VLP is 60-00 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

Background

Chemokines are proteins which induce chemotaxis, promote differentiation of immune cells, and cause tissue extravasation. Given these properties, their role in anti-tumor immune response in the cancer environment is of great interest. Although immunotherapy has shown clinical benefit for some cancer patients, other patients do not respond. One of the mechanisms of resistance to checkpoint inhibitors may be chemokine signaling. The CXCL9, -10, -11/CXCR3 axis regulates immune cell migration, differentiation, and activation, leading to tumor suppression (paracrine axis). However, there are some reports that show involvements of this axis in tumor growth and metastasis (autocrine axis). Thus, a better understanding of CXCL9, -10, -11/CXCR3 axis is necessary to develop effective cancer control.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.