Fluorescent Human SSTR2 Full Length Protein (VLP)

Catalog # SS2-HF2G3

Synonym

Smstr2,Somatostatin R2,somatostatin receptor 2,somatostatin receptor type 2,SomatostatinR2,SRIF-1,SS2R,SS-2-R,SS2-R,SST2,SSTR2

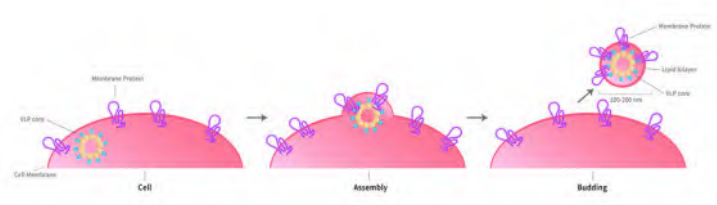
Source

Fluorescent Human SSTR2 Full Length Protein (VLP)(SS2-HF2G3) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Ile 369 (Accession # P30874-1).
Predicted N-terminus: Asp

Molecular Characterization

This protein carries a GFP tag.

Virus-like particles(VLPs) are formed by self-assembly of envelop/capsid proteins from viruses. Membrane 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.

Conjugate

GFP

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 530 nm

Endotoxin

Less than 1.0 EU per μg by the LAL method.
*The isotype control of empty/mock VLP (Cat. No. VLP-NF2P4) is sold separately and not included in protein, you can follow this link for product information.

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.

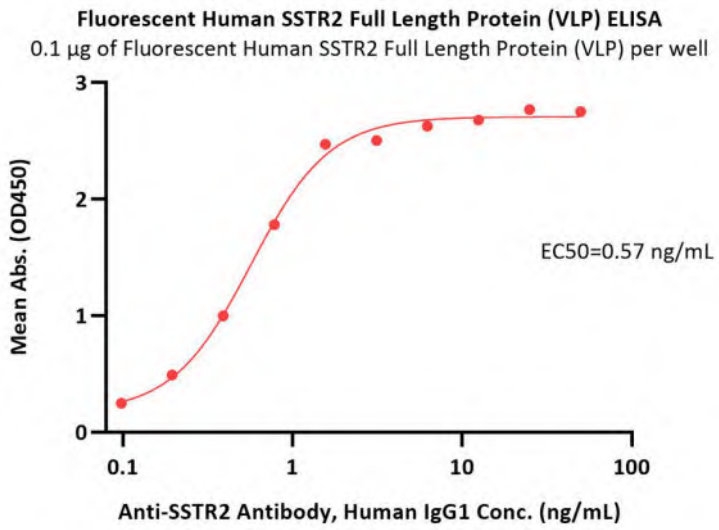
Storage

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

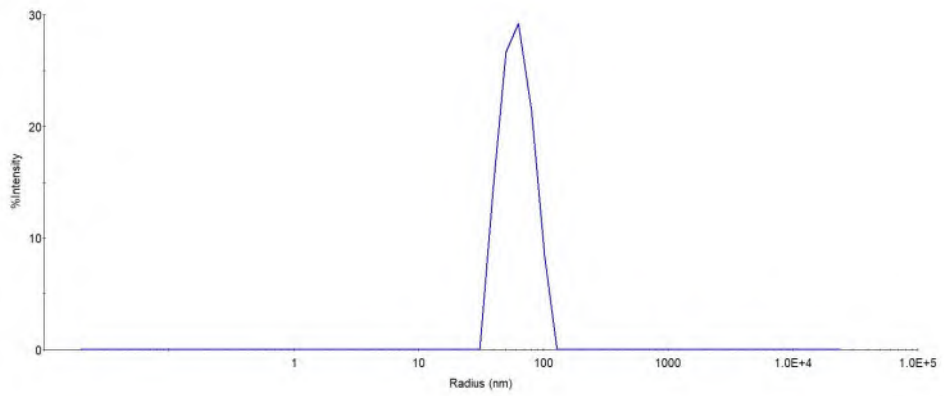
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

Bioactivity-ELISA



Immobilized Fluorescent Human SSTR2 Full Length Protein (VLP) (Cat. No. SS2-HF2G3) at 1 μg/mL (100 μL/well) can bind Anti-SSTR2 Antibody, Human IgG1 with a linear range of 0.1-4 ng/mL (QC tested).

Identity-DLS



The mean peak Radius of VLP is 55-75 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

Background

Somatostatin is a peptide with a potent and broad antisecretory action, which makes it an invaluable drug target for the pharmacological management of pituitary adenomas and neuroendocrine tumors. Somatostatin receptors (SSTR1, 2A and B, 3, 4 and 5) belong to the G protein coupled receptor family and have a wide expression pattern in both normal tissues and solid tumors. Investigating the function of each SSTR in several tumor types has provided a wealth of information about the common but also distinct signaling cascades that suppress tumor cell proliferation, survival and angiogenesis. This provided the rationale for developing multireceptor-targeted somatostatin analogs and combination therapies with signaling-targeted agents such as inhibitors of the mammalian (or mechanistic) target of rapamycin (mTOR). The ability of SSTR to internalize and the development of rabiolabeled somatostatin analogs have improved the diagnosis and treatment of neuroendocrine tumors.

Clinical and Translational Updates