

Recombinant ZIKV (strain Zika SPH2015) Envelope protein (aa 291-696, His Tag)

Catalog Number: PKSV030267

Note: Centrifuge before opening to ensure complete recovery of vial contents.

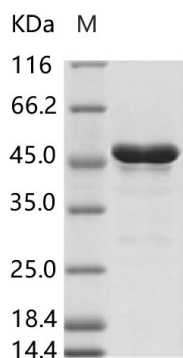
Description

Species	ZIKV
Source	Baculovirus-Insect Cells-derived ZIKV ZIKV (strain Zika SPH2015) Envelope protein Ile291-Thr696, with an C-terminal His
Calculated MW	45.6 kDa.
Accession	ALU33341.1
Bio-activity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM Tris, 300 mM NaCl, pH 8.0, 10 % glycerol. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Envelope of Zika virus is responsible for receptor binding and membrane. Analysis of the envelope protein of Zika, from Brazilian Zika SPH215 (KU321639), indicates predicted B and T cell epitopes in peptides that are consistent to those reported for dengue, YFYF and Japanese encephalitis. The envelope Domain II B cell epitope, to which much dengue non-neutralizing cross reaction is attributed, is also conserved also in Zika virus, consistent with prior field observations of cross reactivity with dengue and YF. Domain III of the Zika envelope protein, likely the main specific neutralizing domain, is distinct from recent Brazilian dengue isolates and a recent Peruvian YF isolate (GQ379163), 76% of possible major histocompatibility complex class (MHC) I and MHC II binding peptides and potential B cell linear epitopes are unique to Zika virus.