

Structural polyprotein Protein, Ross river virus (Cell-Free, His)

Cat. No.:	HY-P702455
Synonyms:	Structural polyprotein; p130
Species:	Virus
Source:	E. coli Cell-free
Accession:	P08491 (Y817-R1254)
Gene ID:	/
Molecular Weight:	50.3 kDa

PROPERTIES

AA Sequence	<pre> YEHTATIPNV VGFPHYKAHIE RNGFSPMTLQ LEVVETSWEP TLNLEYITCE YKTVVPSPI KCCGTSECSS KEQPDYQCKV YTGVPFPMWG GAYCFCDSEN TQLSEAYVDR SDVCKHDHAS AYKAHTASLK ATIRISYGTI NQTTEAFVNG EHAVNVGGSK FIFGPISTAW SPFDNKIVVY KDDVYNQDFP PYGSGQPGRF GDIQSRTVES KDLYANTALK LSRPSPGVVH VPYTPTPSGF KYWLKEKGS LNTKAPFGCK IKTNPVRAMD CAVGSI PVSM DIPDSAFTRV VDAPAVTDLS CQVVVCTHSS DFGGVATLSY KTDKPGKCAV HSHSNVATLQ EATVDVKEDG KVTVHFSTAS ASPAFKV SVC DAKTTCTAAC EPPKDHIVPY GASHNNQVFP DMSGTAMTWV QRLASGLGGL ALI AVVVLVL VTCITMRR </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The Structural polyprotein Protein orchestrates the formation of an icosahedral capsid with T=4 symmetry, comprised of 240 capsid protein copies encased in a lipid membrane, and adorned with 80 spikes composed of E1-E2 heterodimeric trimers. Functionally, the capsid protein binds to the viral RNA genome, enabling its translation following genome release, and possesses protease activity leading to autocatalytic cleavage. Post-cleavage, it associates with ribosomes and rapidly assembles into icosahedral core particles before associating with the spike glycoprotein E2 at the cell membrane, promoting budding and mature virion formation. During infection, new virions attach to target cells, undergo clathrin-mediated endocytosis, and release the nucleocapsid into the cytoplasm through membrane fusion. The capsid protein, potentially triggering uncoating, exhibits a dual role in genomic RNA and ribosome binding. Moreover, it specifically inhibits interleukin-1 receptor-associated kinase 1/IRAK1-dependent signaling during viral entry, serving as a mechanism for evading innate immune detection. Additionally, the protein provides a signal sequence for translocating the precursor of protein E3/E2 to the host endoplasmic reticulum. Furin-cleaved E3, associated with spike glycoprotein E1, ensures pH protection during transport in the secretory pathway, with gradual release into the extracellular space upon virion release from the host cell.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA