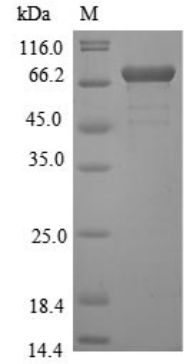
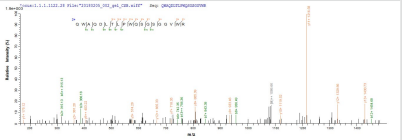
Recombinant Yellow fever virus Genome polyprotein, partial

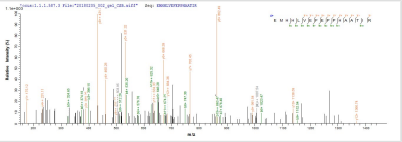
Product Code	CSB-EP365905YAC1
Relevance	Capsid protein C: Plays a role in virus budding by binding to the cell membrane and gathering the viral RNA into a nucleocapsid that forms the core of a mature virus particle. During virus entry, may induce genome penetration into the host cytoplasm after hemifusion induced by the surface proteins. Can migrate to the cell nucleus where it modulates host functions.
Abbreviation	Recombinant Yellow fever virus Genome polyprotein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P03314
Product Type	Recombinant Protein
Immunogen Species	Yellow fever virus (strain 17D vaccine) (YFV)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	AHCIGITDRDFIEGVHGGTWVSATLEQDKCVTVMAPDKPSLDISLETVAIDRPA EVRKVCYNAVLTHVKINDKCPSTGEAHLAEENEGDNACKRTYSDRGWGNGC GLFGKGSIVACAKFTCAKSMSLFEVDQTKIQYVIRAQLHVGAKQENWNTDIKTL KFDALSGSQEVEFIGYGKATLECQVQTAVDFGNSYIAEMETESWIVDRQWAQ DLTLPWQSGSGGVWREMHHLVEFEPPHAATIRVLALGNQEGSLKTALTGAMR VTKDTNDNNLYKLHGGHVSCRVKLSALTLKGTSYKICTDKMFFVKNPTDTGHG TVVMQVKVSKGAPCRIPVIVADDLTAAINKGILVTVNPIASTNDDEVLIEVNPPFG DSYIIVGRGDSRLTYQWHKEGSSIGKLFTQTMKGVERLAVMGDTAWDFSSAG GFFTSVGKGIHTVFGSAFQGL
Research Area	Others
Source	E.coli
Protein Names	Core protein Matrix protein NS2A NS1 NS2A-alpha Flavivirin protease NS2B regulatory subunit Non-structural protein 2B Flavivirin protease NS3 catalytic subunit Non-structural protein 3 NS4A NS4B Non-structural protein 5
Expression Region	286-730aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-GST-tagged and C-terminal Myc-tagged
Mol. Weight	78.4 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP365905YAC1 could indicate that this peptide derived from E.coli-expressed Yellow fever virus (strain 17D vaccine) (YFV) N/A.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP365905YAC1 could indicate that this peptide derived from E.coli-expressed Yellow fever virus (strain 17D vaccine) (YFV) N/A.

Description

The gene fragment corresponding to the 286-730aa of the Yellow fever virus Genome polyprotein protein was synthesized, with appropriate restriction sites suitable for in-frame cloning into an expression vector, with N-terminal 10xHis-GST tag and C-terminal Myc tag. The E.coli was transformed with the expression vector, and the clone was expressed upon certain induction. After the induced cell centrifugation, the recombinant protein was purified from the cell extract and presented as N-terminal 10xHis-GST-tagged and C-terminal Myc-tagged fusion. This recombinant Yellow fever virus Genome polyprotein protein's purity is greater than 85% assayed by SDS-PAGE. The Genome polyprotein protein ran to a band of about 78 kDa molecular weight on the gel.

Yellow fever virus capsid protein is a potent suppressor of RNA silencing that binds double-stranded RNA. Yellow fever virus encodes a protein that blocks the mosquito’s immune response, suggesting the pathogen’s continued existence in nature depends on staying one step ahead of the vector’s antiviral defense. Yellow fever virus capsid protein is a potent repressor of RNA interference. Although it is known that the flavivirus capsid protein is essential for genome packaging and formation of infectious particles, the minimal requirements of the dimeric capsid protein for virus assembly/disassembly have not been characterized. Yellow fever virus genome polyprotein is also known as Capsid protein C or Core protein. Core Protein-Directed Antivirals and Importin β Can Synergistically Disrupt HBV Capsids.

Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.