# **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 482-671aa

**UniProt No.** N/A

NCBI Accession No. NP\_671491

Alternative Names Polyprotein

# **PRODUCT SPECIFICATION**

Molecular Weight 25.4 kDa (226aa)

**Concentration** 0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 80% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE,Denatured

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

### Description

E1 and E2 glycoproteins form a heterodimer that is involved in virus attachment to the host cell, virion internalization through clathrin-dependent endocytosis and fusion with host membrane. E1/E2 heterodimer binds to human LDLR, CD81 and SCARB1/SR-BI receptors, but this binding is not sufficient for infection, some additional liver specific cofactors may be needed. The fusion function may possibly be carried by E1. E2 inhibits human EIF2AK2/PKR activation, preventing the establishment of an antiviral state. E2 is a viral ligand for CD209/DC-SIGN and CLEC4M/DC-SIGNR, which are respectively found on dendritic cells (DCs), and on liver



sinusoidal endothelial cells and macrophage-like cells of lymph node sinuses. These interactions allow capture of circulating HCV particles by these cells and subsequent transmission to permissive cells. Recombinant HCV (Hepatitis C Virus) E2 protein, fused to His-tag at N-terminus, was expressed in E. coli.

### **Amino acid Sequence**

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSERPY CWHYPPRPCG IVPAKSVCGP VYCFTPSPVV VGTTDRSGAP TYSWGANDTD VFVLNNTRPP LGNWFGCTWM NSTGFTKVCG APPCVIGGVG NNTLLCPTDC FRKHPEATYS RCGSGPWITP RCMVDYPYRL WHYPCTINYT IFKVRMYVGG VEHRLEAACN WTRGERCDLE DRDRSELSPL LLSTTQ

#### **General References**

Taylor D.R., et al. (2001) J. Virol. 75:1265-1273 Kalliampakou K.I., et al. (2015) J. Gen. Virol. 86:1015-1025

### DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.