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Schillerstr. 5

AR51578PU-S HCV Envelope glycoprotein E2 (482-671, His-tag) - Purified

Alternate names: Hepatitis C Virus NS1, gp68, gp70

Quantity: 0.1 mg

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

Background: 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.

NCBI: <u>NP 671491</u>

Source:

Format: State: Liquid purified protein

E. coli

Purity: >80% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Description: Recombinant HCV(Hepatitis C Virus) E2 protein, fused to His-tag at N-terminus, was

expressed in E.coli.

AA Sequence:

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSERPY CWHYPPRPCG IVPAKSVCGP VYCFTPSPVV VGTTDRSGAP TYSWGANDTD VFVLNNTRPP LGNWFGCTWM NSTGFTKVCG APPCVIGGVG NNTLLCPTDC FRKHPEATYS RCGSGPWITP RCMVDYPYRL WHYPCTINYT

IFKVRMYVGG VEHRLEAACN WTRGERCDLE DRDRSELSPL LLSTTQ

Molecular weight: 25.4 kDa (226aa)

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

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

Virol. 86:1015-1025



Pictures:

