

SL16474R

Product Name:	Hepatitis C virus subtype 1b E1
Chinese Name:	丙型肝炎病毒E1抗体
Alias:	Hepatitis C Virus E1; E1 protein; Envelope glycoprotein E1; Gp32; Gp35; HCV E1; HCV envelope glycoprotein E1; Hepatitis C virus envelope glycoprotein E1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Hepatitis C virus subtype 1b
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	21kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Hepatitis C Virus E1:201-300/3010
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Envelope glycoproteins E1 and E2 are involved in virus attachment to the host cell as
	well as in virus endocytosis and fusion with host membrane. 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. DCs are professional antigen presenting cells, critical for host immunity by inducing specific immune responses against a broad variety of pathogens. They act as sentinels in various tissues where they entrap pathogens and convey them to local lymphoid tissue or lymph node for establishment of immunity. Capture of circulating HCV particles by these SIGN+ cells may facilitate virus infection of proximal hepatocytes and lymphocyte subpopulations and may be essential for the establishment of persistent infection.

Function:

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. DCs act as sentinels in various tissues where they entrap pathogens and convey them to local lymphoid tissue or lymph node for establishment of immunity. Capture of circulating HCV particles by these SIGN+ cells may facilitate virus infection of proximal hepatocytes and lymphocyte subpopulations and may be essential for the establishment of persistent infection.

Subcellular Location:

Endoplasmic reticulum membrane; Single-pass type I membrane protein

Gene ID: 951475

Database links:

Entrez Gene: 951475 Hepatitis C Virus

SwissProt: Q03463 Hepatitis C Virus

SwissProt: Q9WMX2 Hepatitis C Virus

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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