

**BM3324****Monoclonal Antibody to HCV Envelope glycoprotein E1 - Purified****Alternate names:**

Hepatitis C Virus E1, gp32, gp35

**Quantity:**

0.1 mg

**Concentration:**

0.1 mg/ml (OD280 nm, E0.1% = 1.3)

**Background:**

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.

**Host / Isotype:**

Mouse / IgG

**Clone:**

BDI198

**Immunogen:**

Recombinant HCV E1 glycoprotein (genotype 1b).

**Format:****State:** Liquid purified Ig fraction from Ascites (> 90% pure)**Purification:** Protein A Chromatography**Buffer System:** 0.01M PBS, pH 7.2 containing 0.09% Sodium Azide as preservative without stabilizing proteins**Applications:****IFA.****ELISA.****Western blot.****Immunohistochemistry.**

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

Specific to HCV E1.

**Storage:**

Upon receipt, store (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**Product Citations:****Purchased from Acris:**

1. Tello D, Rodríguez-Rodríguez M, Yélamos B, Gómez-Gutiérrez J, Peterson DL, Gavilanes F. High-yield production of a chimeric glycoprotein based on permuted E1 and E2 HCV envelope ectodomains. *J Virol Methods*. 2014 Dec 5;213C:38-44. doi: 10.1016/j.jviromet.2014.11.020. PubMed PMID: 25486085.

**General Readings:**

1. Tani H, Komoda Y, Matsuo E, Suzuki K, Hamamoto I, Yamashita T, et al. Replication-competent recombinant vesicular stomatitis virus encoding hepatitis C virus envelope proteins. *J Virol.* 2007 Aug;81(16):8601-12. Epub 2007 Jun 6. PubMed PMID: 17553880.