Anti-HEV (Hepatitis E Virus) Capsid Antibody, Rabbit polyclonal

65-093 100 µg

Storage: Ship at 4℃ and store at -20℃. Do not freeze below -20℃.

Reactivity: Reacts with capsid protein of HEV

Immunogen: Recombinant truncated capsid protein (amino acids 112-608) of HEV (Genotype 3, 2712 strain)

Applications

1. Western blotting (2 µg/mL)
2. Immunoprecipitation (2 µg/mL)
3. Dot blotting (1 ug/mL)
4. ELISA (assay dependent)

Purity: IgG fraction purified with protein A from the rabbit antiserum to capsid protein of HEV

Form: 1 mg/ml in PBS-, 50% glycerol, filter sterilized.

Background: Hepatitis E virus (HEV) is single-strand positive-sense RNA virus in the family Hepeviridae. The disease caused by HEV is an important public health problem in developing countries. A molecular phylogenetic analysis classifies HEV into four major genotypes (genotype 1-4). The genome HEV consists of about 7200 bases and contains three discontinuous and partially overlapping open reading frames (ORFs). ORF1 encodes a methyltransferase, protease, helicase and replicase; ORF2 encodes the capsid protein and ORF3 encodes a protein of undefined function. The viral capsid protein induces neutralizing antibodies, and contains three subdomains, S (aa112-319), M (aa 320-456) and P (aa 457-608). Recombinant capsid protein is composed of approximately 53 kDa, smaller capsid protein subunit.

Data Link: UniProKB Q6J8F7 (CAPSD_HEVMG), genotype 3

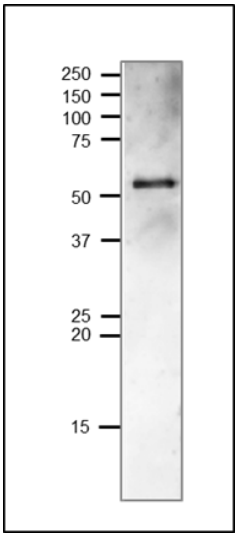

Fig.1 Western blot of recombinant of capsid protein of HEV

50 ng of recombinant capsid of HEV was run on SDS-PAGE (12.5% gel) and blotted onto PVDF membrane for one hour at room temperature (RT).

Anti-HEV capsid antibody was used at 2 µg/ml and incubated for one hour at RT. Second antibody (goat anti-rabbit IgG antibody, HRP-conjugated, ab97051) at 1/10,000 dilution was incubated at one hour at RT.

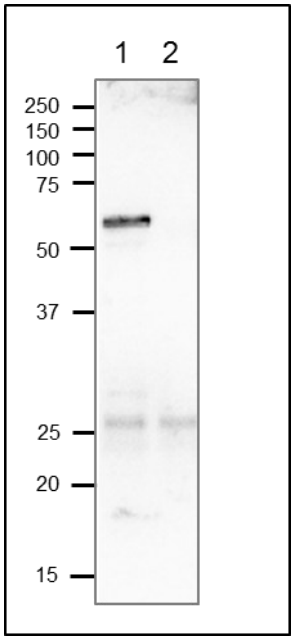

Fig.2 Immunoprecipitation of recombinant capsid of HEV by anti-HEV capsid antibody

1 μg of recombinant capsid of HEV was immune-precipitated with 10μg of anti-HEV capsid antibody and the precipitate was immune-blotted with anti-HEV capsid antibody.

Lane 1：recombinant capsid of HEV

Lane 2：mock

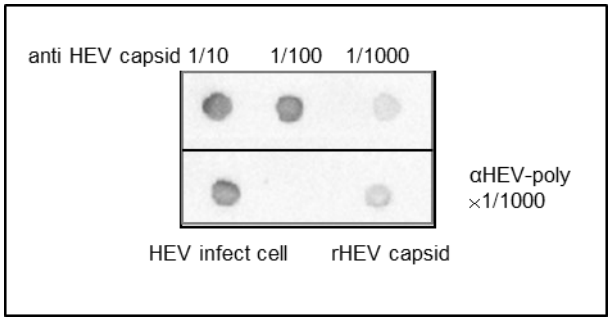

Fig.3 Dot blotting

blot of 2μL of anti HEV capsid polyclonal (1/10, 1/100 or 1/1000 diluted serum), HEV infected cell lysate or 10ng of recombinant HEV capsid protein.

References for HEV-LP uses for immunization.

1.Yamashita T et al.Biological and immunological characteristics of hepatitis E virus-like particles based on the crystal structure. PNAS 2009 Aug 4; 106(31):12986-91 . PMID: 19620712. IP, ELISA

2. Li TC et al. Essential elements of the capsid protein for self-assembly into empty virus-like particles of hepatitis E virus. J Virol. 2005 Oct;79(20):12999-3006. PMID: 16189002

3. Li TC et al. Protection of cynomolgus monkeys against HEV infection by oral administration of recombinant hepatitis E virus-like particles. Vaccine. 2004 Jan 2;22(3-4):370-7. PMID: 14670318

Related Products:

65-090 Anti-HEV Capsid antibody, mouse monoclonal (161)