

HEV-ORF2/ORF3/1 Mosaic

Hepatitis E Virus Open Reading Frame proteins, 4 immunodominant regions recombinant, *E. coli*

Cat. No.	Amount
PR-1183	100 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied as 1 mg/ml solution in 25 mM Tris-HCl, 1 mM EDTA, 0.5 M urea, and 50% glycerol.

Specificity

Immunoreactive with sera of HEV-infected individuals.

Purity

>95% by SDS-PAGE and RP-HPLC

Description

The protein is a mosaic of 4 immunodominant HEV ORF2-ORF3 fragments.

Hepatitis E Virus protein is purified by proprietary chromatographic techniques.

Applications

Antigen in ELISA and Western blots, excellent antigen for detection of HEV with minimal specificity problems.

Background

Hepatitis E virus (HEV) is a major human pathogen in much of the developing world. It is a plus-strand RNA virus with a 7.2-kb polyadenylated genome consisting of three open reading frames, ORF1, ORF2, and ORF3. Of these, ORF2 encodes the major capsid protein of the virus and ORF3 encodes a small protein of unknown function.

Selected References:

- Surjit *et al.* (2004) The ORF2 protein of hepatitis E virus binds the 5' region of viral RNA. *J. Virol.* **78**:320.
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- Tuteja *et al.* (2000) Augmentation of immune responses to hepatitis E virus ORF2 DNA vaccination by codelivery of cytokine genes. *Viral. Immunol.* **13**:169.
- Li *et al.* (2000) Recombinant subunit ORF2.1 antigen and induction of antibody against immunodominant epitopes in the hepatitis E virus capsid protein. *J. Med. Virol.* **60**:379.
- Tyagi *et al.* (2004) The ORF3 protein of hepatitis E virus interacts with liver-specific alpha1-microglobulin and its precursor alpha1-microglobulin/bikunin precursor (AMBp) and expedites their export from the hepatocyte. *J. Biol. Chem.* **279**:29308.
- Tyagi *et al.* (2001) Self-association and mapping of the interaction domain of hepatitis E virus ORF3 protein. *J. Virol.* **75**:2493.
- Zafrullah *et al.* (1997) The ORF3 protein of hepatitis E virus is a phosphoprotein that associates with the cytoskeleton. *J. Virol.* **71**:9045.
- Lal *et al.* (1997) Expression and characterization of the hepatitis E virus ORF3 protein in the methylotrophic yeast, *Pichia pastoris*. *Gene.* **190**:63.