

## HAV-VP3 (residues 304-415) Hepatitis A Virus VP3 Capsid Protein recombinant, *E. coli*

Cat. No.	Amount
PR-1119	100 µg

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

### Avoid freeze / thaw cycles

### Form

Liquid. Supplied in 10 mM CBB pH 9.6, 0.1% SDS and 50% glycerol.

### Protein synonyms/aliases

Genome polyprotein.

### Application

Recombinant HAV-VP3 may be used in ELISA and Western blots, excellent for detection of HAV with minimal specificity problems.

### Specificity

Immunoreactive with sera of HAV-infected individuals.

### Molecular Weight

38 kDa

### Purity

>90% by SDS-PAGE

### Description

The protein contains the HAV VP3 immunodominant regions, amino acids: 304 - 415.

Hepatitis A Virus VP1 protein is purified by proprietary chromatographic techniques.

### Background

HAV, the prototype of the genus Hepatovirus, belongs to the family Picornaviridae.

Its 7.5-kb single-stranded RNA genome bears different distinct regions: the 5' and 3' noncoding regions (NCR), the P1 region, which encodes the structural proteins VP1, VP2, VP3, and a putative VP4, and the P2 and P3 regions encoding nonstructural proteins associated with replication. Hepatitis A virus (HAV) encodes a single polyprotein which is posttranslationally processed into the functional structural and nonstructural proteins.

Only one protease, viral protease 3C, has been implicated in the nine protein scissions.

### Selected References:

- Sanchez *et al.* (2004) A novel CD4+ T-helper lymphocyte epitope in the VP3 protein of hepatitis A virus. *J. Med. Virol.* **72**:525.
- Kanda *et al.* (2004) Hepatitis A virus VP3 may activate serum response element associated transcription. *Scand. J. Gastroenterol.* **38**:307.
- Haro *et al.* (2003) Liposome entrapment and immunogenic studies of a synthetic lipophilic multiple antigenic peptide bearing VP1 and VP3 domains of the hepatitis A virus: a robust method for vaccine design. *FEBS Lett.* **540**:133.
- Chavez *et al.* (2001) Membrane fusion induced by a lipopeptidic epitope from VP3 capsid protein of hepatitis A virus. *Luminescence.* **16**:135.
- Sospedra *et al.* (2001) Interaction study of peptide from VP3 capsid protein of hepatitis A virus through monolayers and fluorescence spectroscopy. *Luminescence.* **16**:103.
- Chavez *et al.* (2001) Membrane fusion by an RGD-containing sequence from the core protein VP3 of hepatitis A virus and the RGA-analogue: implications for viral infection. *Biopolymers.* **58**:63.