Data sheet

Jena Bioscience

HAV-VP1 (residues 524-633)
(Hepatitis A Virus Coat Protein VP1)
Recombinant, *E. coli*

Cat. No.	Amount
PR-1112	100 µg

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

Avoid freeze / thaw cycles

Form
Liquid. Supplied as a 1 mg/ml solution in 10 mM CBB, pH 9.6, 0.1% SDS, and 50% glycerol.

Specificity
Immunoreactive with sera of HAV-infected individuals.

Protein synonyms/aliases
Genome polyprotein

Purity
>95% by SDS-PAGE (coomassie staining) and RP-HPLC.

Description
The protein contains the HAV VP1 immunodominant regions, amino acids: 524-633.
Hepatitis A Virus VP1 protein is purified by proprietary chromatographic techniques.

Application
Recombinant HAV-VP1 Antigen may be used in ELISA and Western blots, excellent for detection of HAV with minimal specificity problems.

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:

Haro I. *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.

Costa-Mattioli M. *et al.* (2002) Molecular evolution of hepatitis A virus: a new classification based on the complete VP1 protein. *J. Virol.* **76**:9516.

Emerson S.U. *et al* (2002) Identification of VP1/2A and 2C as virulence genes of hepatitis A virus and demonstration of genetic instability of 2C. *J. Virol.* **76**:8551.

Kang J.A. *et al.* (2002) A proposed vestigial translation initiation motif in VP1 of hepatitis A virus. *Virus Res.* **87**:11..

Martin A. *et al.* (1999) Maturation of the hepatitis A virus capsid protein VP1 is not dependent on processing by the 3Cpro proteinase. *J. Virol.* **73**:6220.

Graff J. *et al.* (1999) Hepatitis A virus capsid protein VP1 has a heterogeneous C terminus. *J. Virol.* **73**:6015.