DATA SHEET

Jena Bioscience

HAV-VP1 (residues 502-605)

Hepatitis A Virus Coat Protein VP1
recombinant, *E. coli*

Cat. No.	Amount
PR-1112	100 µg

For *in vitro* use only!

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 48 kDa

Purity: > 90 % (SDS-PAGE)

Form: liquid (Supplied in 10 mM CBB pH 9.6, 0.1 % SDS ,50% glycerol)

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

Description:
The *E. coli* derived 48 kDa recombinant protein contains the VP1 immunodominant regions, amino acids 502-605. 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.

Specificity: Immunoreactive with sera of HAV-infected individuals.

Selected References:

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.

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

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

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