



Product Data Sheet

□ Cat # RP-437

Recombinant (E.Coli) Hepatitis A Virus (HAV) VP3

Size: □ 100 ug

Hepatitis A (formerly known as infectious hepatitis) is an acute infectious disease of the liver caused by the hepatitis A virus (HAV).

Forty-two antigenic domains were identified across the hepatitis A virus (HAV) polyprotein by using a set of 237 overlapping 20-mer synthetic peptides spanning the entire HAV polyprotein. Nineteen antigenic domains were found within the structural proteins, and 22 were found within the nonstructural proteins, with 1 domain spanning the junction of VP1 and P2A proteins.

Five of these domains were considered immunodominant, as judged by both the breadth and the strength of their immunoreactivity. One domain is located within the VP2 protein at position 57-90 aa. A second domain, located at position 767-842 aa, contains the C-terminal part of the VP1 protein and the entire P2A protein. A third domain, located at position 1403-1456 aa, comprises the C-terminal part of the P2C protein and the N-terminal half of the P3A protein. The fourth domain, located at position 1500-1519 aa, includes almost the entire P3B, and the last domain, located at position 1719-1764 aa, contains the C-terminal region of the P3C protein and the N-terminal region of the P3D protein.

Four of the five most immunoreactive domains are derived from small HAV proteins and/or encompass protein cleavage sites separating different HAV proteins.

Source of Antigen:

The E.coli derived 38 kDa recombinant protein contains the VP3 immunodominant regions, amino acids 304-415. The protein is purified by proprietary chromatographic technique (is >90% pure as determined by 10% PAGE (coomassie staining). It is supplied in buffer containing 10mM CBB, pH9.6, 0.1% SDS and 50% glycerol.

Form & Storage of Antigen

Short-term: unopened, undiluted vials for less than a week at 4oC. **Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below. Shipping: 4oC for solutions and room temp for powder.

Specificity:

Immunoreactive with sera HAV-infected individuals.

Recommended Usage

ELISA, Western Blotting, Immunocytochemistry

APPLICATIONS:

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

For In vitro research use and manufacturing only.

Related material available from ADI

Catalog#	Description
RP-436	Recombinant (E.Coli) Hepatitis A Virus (HAV) VP4-VP2
RP-437	Recombinant (E.Coli) Hepatitis A Virus (HAV) VP3
RP-438	Recombinant (E.Coli) Hepatitis A Virus (HAV) VP1
RP-439	Recombinant (E.Coli) Hepatitis A Virus (HAV) VP1-P2A (722-830)
RP-440	Recombinant (E.Coli) Hepatitis A Virus (HAV) P2C
RP-441	Recombinant (E.Coli) Hepatitis A Virus (HAV) P2C-P3B
RP-442	Recombinant (E.Coli) Hepatitis A Virus (HAV) P3C
RP-443	Recombinant (E.Coli) Hepatitis A Virus (HAV) VP1-P2A (669-782)
RP-444	Recombinant (E.Coli) Hepatitis A Virus (HAV) P2C-P3A
RP-437	160929SV