



Product Data Sheet

□ Cat # RP-438

Recombinant Hepatitis A Virus VP1

Size: □ 100 ug □ 500 ug

#### **INTRODUCTION:**

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

#### **DESCRIPTION:**

The E.Coli derived 48 kDa recombinant protein contains the VP1 immunodominant regions, amino acids 502-605

#### **METHOD:**

Purified by proprietary chromatographic technique

#### **PURITY:**

Protein is >90% pure as determined by 10% PAGE (coomassie staining).

#### **FORMULATION:**

10mM CBB, pH9.6, 0.1% SDS and 50% glycerol

#### **STORAGE:**

Protein is shipped at ambient temperature.  
Upon arrival, Store at -20°C.

#### **STABILITY:**

Five years frozen. One month in solution at room temperature.

#### **SPECIFICITY:**

Immunoreactive with sera HAV-infected individuals.

#### **STORAGE AND STABILITY:**

If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4oC for ~1 week or aliquots in suitable size and store at -20oC for long term storage.

#### **APPLICATIONS:**

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

#### **Usage:**

This item is for LABORATORY RESEARCH USE ONLY.  
The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

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