



## Recombinant HAV VP1 Protein [GST] (DAG542)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Product Overview</b>	Recombinant Hepatitis A Virus VP1 antigen, contains the the VP1 immunodominant region and a GST fusion partner, has the molecular weight of 39kDa, was expressed in E. coli, and purified in vitro using conventional chromatography techniques.
<b>Antigen Description</b>	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. The protein contains the HAV VP1 immunodominant regions, amino acids: (502-605). Hepatitis A Virus 1 protein is purified by proprietary chromatographic techniques.
<b>Species</b>	HAV
<b>Purity</b>	> 90% pure (10% PAGE coomassie staining). Inclusion Bodies
<b>Conjugate</b>	GST
<b>Applications</b>	Suitable for use in ELISA and Western blot. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
<b>Molecular Weight</b>	39 kDa
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	1 mg/ml
<b>Size</b>	1 mg
<b>Buffer</b>	10mM Carbonate-bicarbonate buffer, pH 9.6, 0.1% SDS containing 50% glycerol
<b>Preservative</b>	None
<b>Storage</b>	2-8°C short term, -20°C long term

# BACKGROUND

## Introduction

Hepatitis A virus (HAV) is the sole member of the Hepatovirus genus within the family Picornaviridae. The capsid of HAV encloses a single-stranded RNA genome of about 7.5 kb which is translated into a single polyprotein. The virion proteins VP1 to VP4 and the nonstructural proteins are generated from the polyprotein by a cascade of proteolytic cleavages. Only one protease, viral protease 3C, has been implicated in the nine protein scissions. Processing of the capsid protein precursor region generates a unique intermediate, PX (VP1-2A), which accumulates in infected cells and is assumed to serve as precursor to VP1 found in virions, although the details of this reaction have not been determined. Capsid proteins VP1, VP2, and VP3 form a closed capsid enclosing the viral positive strand RNA genome. VP1 is a major viral antigen.

## Keywords

HAV; HAV VP1-P2A; Hepatitis A Virus VP1-P2A; Picornaviridae; Hepatovirus