

## HDV (residues 1-108, 151-209)

### Hepatitis Delta Virus

recombinant, *E. coli*

Cat. No.	Amount
PR-1182	100 µg

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

#### Avoid freeze / thaw cycles

#### Form

Liquid. Supplied as 1 mg/ml solution in 10 mM CBB, pH 10.0, 100mM NaCl and 50% glycerol.

#### Applications

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

#### Specificity

Immunoreactive with sera of HDV-infected individuals.

#### Purity

>95% by SDS-PAGE and RP-HPLC.

#### Description

The protein contains the HDV immunodominant regions, amino acids: 1-108, 151-209.

Hepatitis D Virus proteins are purified by proprietary chromatographic techniques (purified from inclusion bodies).

#### Background

Hepatitis delta virus (HDV) contains a circular RNA which encodes a single protein, hepatitis delta antigen (HDAg). HDAg exists in two forms, a small form (S-HDAg) and a large form (L-HDAg). SHDAg can transactivate HDV RNA replication. Posttranslational modifications, such as phosphorylation and acetylation, of S-HDAg can modulate HDV RNA replication.

The RNAs undergo different forms of posttranscriptional RNA processing. Transcripts of both the genomic RNA and its exact complement, the antigenomic RNA, undergo ribozyme cleavage and RNA ligation.

In addition, antigenomic RNA transcripts can undergo 5' capping, 3' polyadenylation, and even RNA editing by an adenosine deaminase

#### Selected References:

Anisimova M. and Yang Z. (2004) Molecular evolution of the hepatitis delta virus antigen gene: recombination or positive selection? *J. Mol. Evol.* **59**:815.

Savochkina *et al.* (2004) Properties of antigenomic hepatitis delta virus ribozyme cis- and trans- analogs. *Nucleotides Nucleic Acids.* **23**:935.

Li *et al.* (2004) Hepatitis delta virus antigen is methylated at arginine residues, and methylation regulates subcellular localization and RNA replication. *J. Virol.* **78**:13325.

Rohrig *et al.* (2004) In vitro non-natural amino acid mutagenesis using a suppressor tRNA generated by the cis-acting hepatitis delta virus ribozyme. *Biochem. Biophys. Res. Commun.* **325**:731.

Hartwig *et al.* (2004) Interferon-alpha stimulation of liver cells enhances hepatitis delta virus RNA editing in early infection. *J. Hepatol.* **41**:667.