**Proteins** 



## **Product** Data Sheet

PVFGANSNNP

## Large envelope Protein, HBV-A (Cell-Free, P17101, His)

Cat. No.: HY-P702355

Synonyms: Large envelope protein; L glycoprotein; L-HBsAg; LHB; Large S protein; Large surface protein;

Major surface antigen

Virus Species:

E. coli Cell-free Source: P17101 (G2-I400) Accession:

Gene ID:

Molecular Weight: 45.1 kDa

## **PROPERTIES**

**AA Sequence** 

DWDFN
QGMLT

PIKDH WPAANQVGVG AFGPGFTPPH GGVLGWSPQA PVSTI PPPASANRQS GRQPTPISPP LRDSHPQAMQ QDPRVRGLYF NPAPNIASHI WNSTAFHQAL  $\mathsf{P} \; \mathsf{A} \; \mathsf{G} \; \mathsf{G} \; \mathsf{S} \; \mathsf{S} \; \mathsf{G} \; \mathsf{T} \; \mathsf{V}$ FLGPLPVLQA SSISARTGDP VTNMENITSG GFFLLTRILT IPQSLDSWWT SLNFLGGSPV CLGQNSRSPT SNHSPTSCPP  $I\ C\ P\ G\ Y\ R\ W\ M\ C\ L$ RRFIIFLFIL LLCLIFLLVL LDYQGMLPVC TGPCKTCTTP PLILGSTTTS AQGNSMFPSC CCTKPTDGNC TCIPIPSSWA FAKYLWEWAS VRFSWLSLLV PFVQWFVGLS PTVWLSAIWM IVSSFIPLLP IFFCLWVYI MWYWGPSLYS

LGFFPDHQLD

**Appearance** 

Lyophilized powder.

GGWSSKPRKG

**Formulation** 

Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

MGTNLSVPNP

**Endotoxin Level** 

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

## **DESCRIPTION**

Background

The Large Envelope Protein exhibits two distinct topological conformations, termed 'external' or Le-HBsAg, and 'internal' or

Li-HBsAg. In its external conformation, the protein serves as a crucial mediator for attaching the virus to cell receptors, initiating infection, and determining species specificity and liver tropism. This interaction prompts virion internalization primarily through caveolin-mediated endocytosis, while also facilitating fusion between the virion membrane and the endosomal membrane. In its internal conformation, the protein plays a pivotal role in virion morphogenesis and functions as a matrix protein, establishing contact with the nucleocapsid. Simultaneously, the middle envelope protein contributes significantly to virion budding, inducing a nucleocapsid-independent process. This budding process leads to the formation of subviral lipoprotein particles with a diameter of 22 nm, lacking a nucleocapsid.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com