

## Product Data Sheet

## Large envelope Protein, HBV-C (P.pastoris, 180a.a, His)

Cat. No.:	HY-P702559
Synonyms:	S; Large envelope protein; L glycoprotein; L-HBsAg; LHB; Large S protein; Large surface protein; Major surface antigen
Species:	Virus
Source:	P. pastoris
Accession:	P31868 (G2-G181)
Gene ID:	/
Molecular Weight:	20.9 kDa

PROPERTIES	
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of Tris-based buffer,50% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less them 100 up/mL in ddU. O
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/mL in ddH <sub>2</sub> O.
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.

Background       The Large Envelope Protein exists in two topological conformations, namely 'external' or Le-HBsAg, and 'internal' or Li-HBsAg. In its external conformation, the protein acts as a critical agent, binding the virus to cell receptors and initiating infection. This pivotal interaction not only establishes species specificity and liver tropism but also triggers virion internalization, predominantly through caveolin-mediated endocytosis. The Large Envelope Protein further facilitates fusion between the virion membrane and the endosomal membrane. In its internal conformation, the protein plays a crucia role in virion morphogenesis, functioning akin to a matrix protein and mediating contact with the nucleocapsid. Simultaneously, the middle envelope protein plays a vital role in virion budding, inducing a nucleocapsid-independent process. This budding mechanism leads to the formation of subviral lipoprotein particles, with a diameter of 22 nm, devoid	DESCRIPTION	
HBsAg. In its external conformation, the protein acts as a critical agent, binding the virus to cell receptors and initiating infection. This pivotal interaction not only establishes species specificity and liver tropism but also triggers virion internalization, predominantly through caveolin-mediated endocytosis. The Large Envelope Protein further facilitates fusion between the virion membrane and the endosomal membrane. In its internal conformation, the protein plays a crucia role in virion morphogenesis, functioning akin to a matrix protein and mediating contact with the nucleocapsid. Simultaneously, the middle envelope protein plays a vital role in virion budding, inducing a nucleocapsid-independent		
of a nucleocapsid.	Background	HBsAg. In its external conformation, the protein acts as a critical agent, binding the virus to cell receptors and initiating infection. This pivotal interaction not only establishes species specificity and liver tropism but also triggers virion internalization, predominantly through caveolin-mediated endocytosis. The Large Envelope Protein further facilitates fusion between the virion membrane and the endosomal membrane. In its internal conformation, the protein plays a crucial role in virion morphogenesis, functioning akin to a matrix protein and mediating contact with the nucleocapsid. Simultaneously, the middle envelope protein plays a vital role in virion budding, inducing a nucleocapsid-independent process. This budding mechanism leads to the formation of subviral lipoprotein particles, with a diameter of 22 nm, devoid

## 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