

Rabbit Anti-large S protein antibody

SL0343R

Product Name	large S protein
Chinese Name	人乙肝病毒 Large S 蛋白抗体
Alias	HBSAG_HBVC5; preS1/preS2/S; Hepatitis B Virus Surface Antigen; Large envelope protein; L glycoprotein; L-HBsAg; LHB; Large S protein; Large surface protein; Major surface antigen; Hepatitis B virus ad/Japan/S-179/1988.
Research Area	Tumour immunology Bacteria and viruses
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Hepatitis B virus) WB=1:500-2000,ELISA=1:5000-10000 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	31/44kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from HBSAG_HBVC5: 201-281/281
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	(predicted:Hepatitis B virus)1M TBS(pH7.4) with 1% BSA, (predicted:Hepatitis B virus)3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

[PubMed](#)

HBV surface proteins [Hepatitis B virus]. Major surface antigen from hepadnavirus; pfam00695.

Function:

The large envelope protein exists in two topological conformations, one which is termed 'external' or Le-HBsAg and the other 'internal' or Li-HBsAg. In its external conformation the protein attaches the virus to cell receptors and thereby initiating infection. This interaction determines the species specificity and liver tropism. This attachment induces virion internalization predominantly through caveolin-mediated endocytosis. The large envelope protein also assumes fusion between virion membrane and endosomal membrane (Probable). In its internal conformation the protein plays a role in virion morphogenesis and mediates the contact with the nucleocapsid like a matrix protein.

The middle envelope protein plays an important role in the budding of the virion. It is involved in the induction of budding in a nucleocapsid independent way. In this process the majority of envelope proteins bud to form subviral lipoprotein particles of 22 nm of diameter that do not contain a nucleocapsid.

Subunit:

Li-HBsAg interacts with capsid protein and with HDV Large delta antigen. Isoform M associates with host chaperone CANX through its pre-S2 N glycan. This association may be essential for M proper secretion.

Product Detail

Subcellular Location:

Virion membrane.

Post-translational modifications:

Isoform M is N-terminally acetylated at a ratio of 90%, and N-glycosylated at the pre-S2 region.

Myristoylated.

Similarity:

Belongs to the orthohepadnavirus major surface antigen family.

SWISS:

P03140

Gene ID:

1403696

Database links:

[SwissProt: P03140](#) Hepatitis B virus

乙型肝炎病毒颗粒直径 42nm，由包膜与核衣壳组成，包膜含有碳水化合物、蛋白质和脂类。其中蛋白质为主要抗原成分，包括 S 抗原：pre-s 区和 pre-s2 区，这些抗原成分在病毒侵入细胞过程中有着至关重要的作用，为深入研究乙型肝炎病毒发病机理及变异有着至关重要的作用。