

## ARG63000 anti-HBV surface antigen / HBsAg antibody [HB5]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [HB5] recognizes Hepatitis B surface antigen / HBs Ag
Tested Reactivity	HBV
Tested Application	ELISA, ICC/IF
Specificity	The clone HB5 recognizes following Hepatitis B virus (HBV) subtypes: ayw2, ayw3, ayw4, ayr, adw2, adw4, adrq+, adrq-. Hepatitis B surface antigen (HBsAg) is a marker of infectivity. Specificity of the antibody HB5 was verified by ELISA on panel of virus subtypes identified on International Workshop on HBsAg Subtypes (Paris, April 1975). HB5 does not cross-block with the antibody HB3.
Host	Mouse
Clonality	Monoclonal
Clone	HB5
Isotype	IgG2a
Target Name	HBV surface antigen / HBsAg
Species	HBV
Immunogen	Purified HbsAg from human plasma.
Conjugation	Un-conjugated
Alternate Names	large S protein; pre-S1/pre-S2/S; L glycoprotein; L-HBsAG; LHB; large surface protein; major surface antigen

### Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Purification	Purified from ascites by precipitation methods and ion exchange chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links	<a href="#">GeneID: 944569 HBV</a>
Gene Symbol	S
Gene Full Name	L-HBsAG
Background	Hepatitis B virus (HBV) is a hepadnavirus which has a circular genome composed of partially double-stranded DNA. The HBV surface protein antigens (HBsAg) are comprised of large (LHBs), middle (MHBs) and small (SHBs, also called major) protein. LHBs contains preS1, prS2, and small protein. MHBs does not include preS1 protein and SHBs dose not include preS1 and preS2 proteins. HbsAg and its antibodies have been developed as biomarkers to monitor infection stage. Expression of preS1 and preS2 in tissue or serum are also important to reveal the mechanism of HBV infection.
Function	<p>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.</p> <p>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. [UniProt]</p>
Highlight	Related products: <a href="#">HBsAg antibodies:</a>
Research Area	Cancer antibody; Microbiology and Infectious Disease antibody