

ARG10134 anti-HBV surface antigen / HBsAg antibody [Hs41]

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [Hs41] recognizes Hepatitis B surface antigen / HBs Ag
Tested Reactivity	HBV
Tested Application	ELISA
Specificity	Reacting with the following HBsAg subtypes: ayw1, ayw2, ayw3, ayw4, ayr, adw2, adw4, adrq+, adrq-, ayw3 (Fer).
Host	Mouse
Clonality	Monoclonal
Clone	Hs41
Isotype	IgG1
Target Name	HBV surface antigen / HBsAg
Species	HBV
Immunogen	recombinant HBsAg of ayw subtype.
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. (capture - detection): Hs33 - Hs41.

Application Note
ELISA sensitivity: 50 pg/ml
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Protein G affinity purified
Buffer	PBS (pH 7.4) and 0.1% Sodium azide
Preservative	0.1% Sodium azide
Concentration	1.0-2.0 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 [GeneID: 944569 HBV](#)

Gene Symbol S

Gene Full Name L-HBsAg

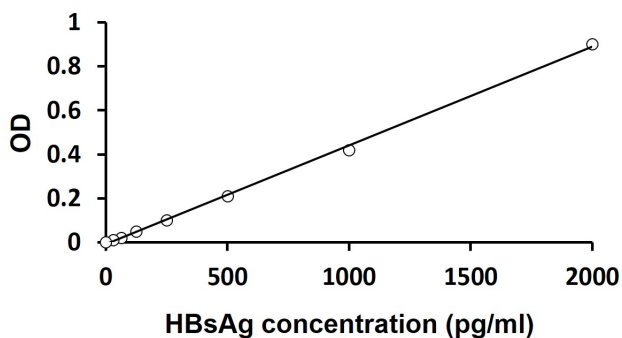
Background Hepatitis B virus (HBV) is a hepadnavirus which has a circular genome composed of partially double-stranded DNA. The HBV surface protein antigens (HBsAg) are comprised of large (LHBs), middle (MHBs) and small (SHBs, also called major) protein. LHBs contains preS1, prS2, and small protein. MHBs does not include preS1 protein and SHBs does 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 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. [UniProt]

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[HBsAg antibodies:](#)

Research Area Cancer antibody; Microbiology and Infectious Disease antibody

Images



ARG10134 anti-HBV surface antigen / HBsAg antibody [Hs41] standard curve image

ARG10134 anti-HBV surface antigen / HBsAg antibody [Hs41] results of a typical standard run with optical density reading at 450 nm.

Capture-detection pair: Hs33 (ARG10828) - Hs41 (ARG10134)