

Product datasheet

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Package: 100 μg

Store at: -20°C

ARG10828 anti-HBV surface antigen / HBsAg antibody [Hs33]

Summary

Product Description Mouse Monoclonal antibody [Hs33] recognizes Hepatitis B surface antigen / HBs Ag

Tested Reactivity HBV
Tested Application ELISA

Specificity Reacting with the following HBsAg subtypes: ayw1, ayw2, ayw4, ayr, adw2, adw4, adrq+, adrq-,

ayw3 (Fer).

Host Mouse

Clonality Monoclonal

Isotype IgG2a

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 Purification with Protein G.

Buffer PBS (pH 7.4) and 0.09% Sodium azide.

Preservative 0.09% Sodium azide

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

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

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.

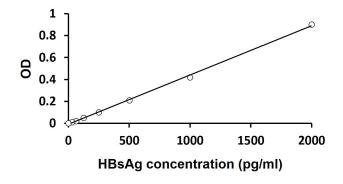
The middle envelope protein plays an important role in the budding of the virion. It is involved in the induction of budding in a nucleocapsid independent way. In this process the majority of envelope proteins bud to form subviral lipoprotein particles of 22 nm of diameter that do not contain a

nucleocapsid. [UniProt]

Highlight

Related products: HBsAg antibodies;

Images



ARG10828 anti-HBV surface antigen / HBsAg antibody [Hs33] standard curve image

ARG10828 anti-HBV surface antigen / HBsAg antibody [Hs33] results of a typical standard run with optical density reading at 450 nm.

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