# ARG65666
# anti-HBV preS2 antibody [SQab1507]

Package: 100 µg
Store at: -20°C

## Summary

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|---|---|
| Product Description | Mouse Monoclonal antibody [SQab1507] recognizes HBV preS2 |
| Tested Reactivity | HBV |
| Tested Application | ELISA, ICC/IF, IHC-P, WB |
| Specificity | This antibody could recognize clinical samples including HBsAg (L-HBs and M-HBs) in serum, plasma, and tissue specimens. The antibody does not react with S-HBs protein. |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | SQab1507 |
| Isotype | IgG1 |
| Target Name | HBV preS2 |
| Species | HBV |
| Immunogen | GST-tagged fusion protein around aa. 31-55 of HBV preS2 |
| 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 | 1:5000-1:10000 |
| ICC/IF | 1:250-1:1000 |
| IHC-P | 1:200-1:350 |
| WB | 1:2500-1:6000 |

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

## Properties

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| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | PBS (pH 7.4) and 0.01% Thimerosal. |
| Preservative | 0.01% Thimerosal |
| Concentration | 1 mg/ml |

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| 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

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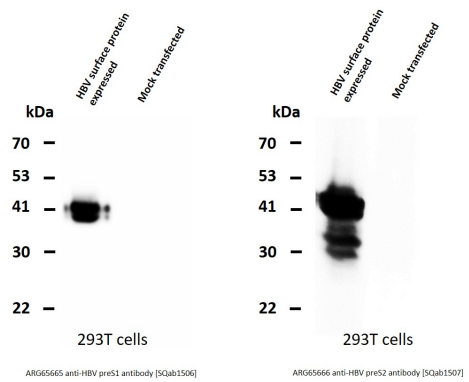
| Database links | GeneID: 944569 HBV |
| Gene Symbol | S |
| Gene Full Name | L-HBsAG |
| Background | Hepatitis B virus (HBV) is a hepadnavirus which has a circular genome composed of partially double-stranded DNA. The HBV surface protein antigens (HBsAg) are comprised of large (LHBs), middle (MHBs) and small (SHBs, also called major) protein. LHBs contains preS1, prS2, and small protein. MHBs does not include preS1 protein and SHBs 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.<br>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] |
| Research Area | Cancer antibody; Microbiology and Infectious Disease antibody |

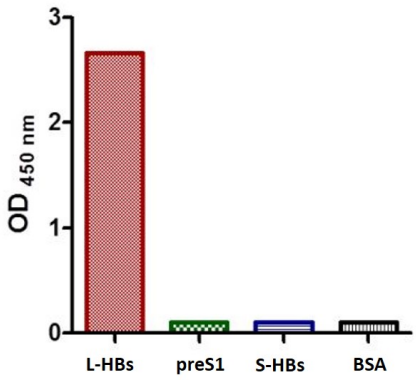
## Images




ARG65666 anti-HBV preS2 antibody [SQab1507] WB image

Western blot: 1) HBV surface protein expressed 293T cell lysate and 2) 293T cell lysate (Mock) stained with ARG65665 anti-HBV preS1 antibody [SQab1506] (left) or ARG65666 anti-HBV preS2 antibody [SQab1507] (right) at 1:2500 dilution.

Data showed ARG65665 anti-HBV preS1 antibody [SQab1506] reacts with L-HBs protein only and ARG65666 anti-HBV preS2 antibody [SQab1507] reacts with L-HBs and M-HBs proteins.




ARG65666 anti-HBV preS2 antibody [SQab1507] ELISA image

Direct ELISA: Direct ELISA data shows that ARG65666 anti-HBV preS2 antibody [SQab1507] reacts with HBV L-HBs protein but not preS1 fragment, S-HBs protein and BSA.