



## MONOCLONAL ANTIBODY

*For research use only. Not for clinical diagnosis.*

**Catalog No. BCL-AB-001**

# Anti HBV Pre-S1 antibody, mouse mono-1

## BACKGROUND

Hepatitis B virus (HBV) expresses three types of surface antigens, i.e. S-, M-, and L-protein. L-protein is composed of S-, Pre-S2, and Pre-S1 region. The deletion of Pre-S1 region forms M-protein, and further deletion of Pre-S2 region results in S-protein. The Pre-S1 region is known to be the hepatic cell recognition site and to be important in the HBV infection processes.

This product, anti HBV Pre-S1 antibody, is a monoclonal antibody that specifically recognize Pre-S1 region and can be used to detect HBV Pre-S1 region. This product provides useful tools in researches for HBV infection and other purposes.

<b>Product type</b>	Primary antibodies
<b>Host</b>	Mouse
<b>Source</b>	Purified from Ascites
<b>Form</b>	Liquid
<b>Volume</b>	100ug
<b>Concentration</b>	1mg/mL in 0.9% Saline
<b>Specificity</b>	HBsAg L-protein, Pre-S1
<b>Antigen</b>	Partial peptide of Pre-S1
<b>Isotype</b>	IgG1k

## Application notes

WB, ELISA

### Recommended use

### Recommended dilutions

Western blotting, 50-200ng/ml

ELISA, 0.2ug/ml.

ELISA can be constructed by combination use of Anti HBV Pre-S1 antibody, mouse mono-2 (cat #: BCL-AB-002). As a positive control or the standard for the ELISA, HBsAg-Lprotein (cat# BCL-AG-001) can also be used.

Optimal dilutions/concentrations should be determined by the end user.

## Cross reactivity

see below figure

## Storage

Store at -20°C (do not repeat freeze and thaw)

## References

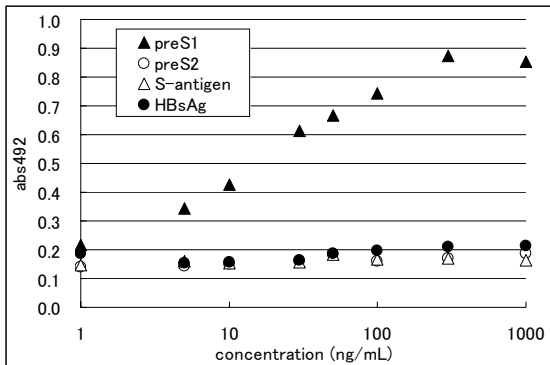
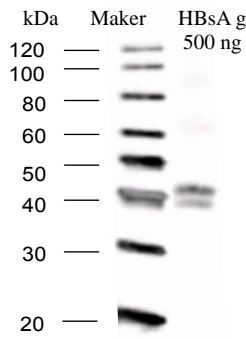


Fig.1. Specificity of the antibody recognition

Among components of L-protein, only the PreS-1 region peptide was recognized. The HBsAg derived from human serum that does not contain L-protein was not recognized by the antibody.



Human derived HBsAg which contain L-protein was blotted and immunostained by this product, anti-Pre-S1 antibody mouse mono-1. Two positive bands were detected in about 42KDa which correspond to L-protein. The doublet signal is due to the difference of glycosylation of L-proteins.

Fig.2. Western Blotting for HBsAg, L-protein

**RELATED PRODUCT**

BCL-AB-002 Anti HBV Pre-S1 antibody, mouse mono-2

BCL-KIT-001 Detection kit for HBsAg L-protein Pre-S1 antigen (ELISA)

BCL-KIT-002 Detection kit for Anti HBsAg antibody (ELISA)

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Manufactured by  **Beacle, Inc.**



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