

## Anti-HBsAg Pre-S1, Polyclonal Antibodies

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. So called HBsAg is composed of either S-protein alone or a mixture of S- and M-proteins. The Pre-S1 region is known to be the hepatic cell recognition site and to be important in the HBV infection. Pre-S1 region is known to have variation of amino acid sequence depending on genotypes.

The present products are polyclonal antibody against Pre-S1 domain. Three products are available.

### General information

Source : White rabbit  
 Appearance : liquid form (PBS containing biochemically inactive preservative)  
 concentration : 1 mg/mL  
 Antigen : Pre-S1 peptide with thioredoxin tag (genotype C or D)  
 Purification : affinity by Protein A  
 (BCL-ABP1-03 is further affinity purified by Pre-S1peptide)  
 Storage : 4°C (for long term storage at -20°C avoid freeze and saw)  
 Usage : ELISA (0.1 to 10 µg/mL), Western blot (0.1 to 10 µg/mL)

### Product variation and product #

Product #	Product name
BCL-ABP1-01	Anti-HBsAg-Pre-S1 Antibody, Poly-1
BCL-ABP1-02	Anti-HBsAg-Pre-S1 Antibody, Poly-2
BCL-ABP1-03	Anti-HBsAg-Pre-S1 Antibody, Poly-3, high affinity

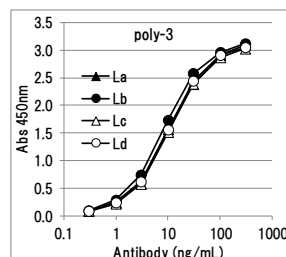
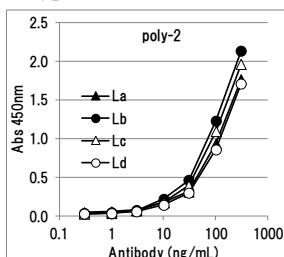
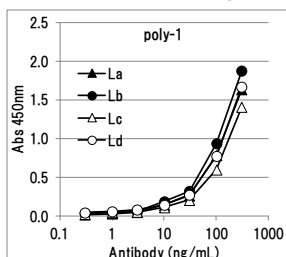
BCL-ABP1-03 is about 10 times higher affinity than other two.

### Antigen specificity

These antibodies bind only to Pre-S1 domain and not to S or Pre-S2 domains.

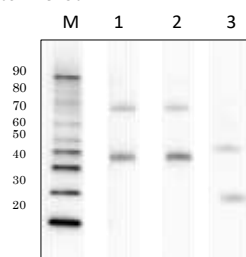
### Genotype specificity

All antibodies bind to L antigen of genotype A,B,C and D.



### Examples

#### Western blot

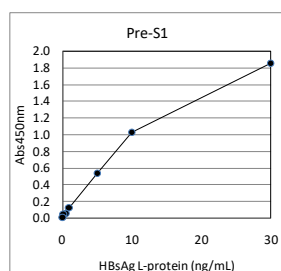


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1. Antibody: anti-Pre-S1 (Code#: BCL-ABP1-01)  
Antigen: HBsAg-L (Code#: BCL-AG01)
2. Antibody: anti-Pre-S2 (Code#: BCL-ABP2-01)  
Antigen: HBsAg -L (Code#: BCL-AG01)
3. Antibody: anti-S antigen (Code#: BCL-ABPS-01)  
Antigen: HBsAg -XT (Code#: BCL-AGX02)

Two bands seen in figure correspond to monomer and dimer of sample antigen.

#### ELISA



#### ELISA condition

Immobilized IgG: anti-Pre-S1 antibody (polyclonal, code#: BCL-ABP1-01) at 10µg/mL

Blocking: k-Block-e (Code#: BCL-BKHE-01)

Detection IgG: anti-Pre-S1 antibody (monoclonal, code#: BCL-AB-02, HRP-labeled): 25ng/mL

Antigen: HBsAg L-protein (monoclonal, Code#: BCL-AG-01)

Beacle Inc  
 E-mail: [technical-support@beacle.com](mailto:technical-support@beacle.com)  
 HP: <http://www.beacle.com>