

Anti HBsAg Pre-S1, Monoclonal 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 monoclonal antibody against Pre-S1 domain.

General information

Source : mouse ascitic fluid, monoclonal
 Appearance : liquid form (saline containing biochemically inactive preservative)
 concentration : 1 mg/mL
 Antigen : HBsAg L-protein
 Purification : affinity by Protein G
 Storage : 4°C (for long term storage at -20°C avoid freeze and saw)
 Usage : ELISA (to be tested by user), Western blot (50 to 200 ng/mL)

Product variation and product

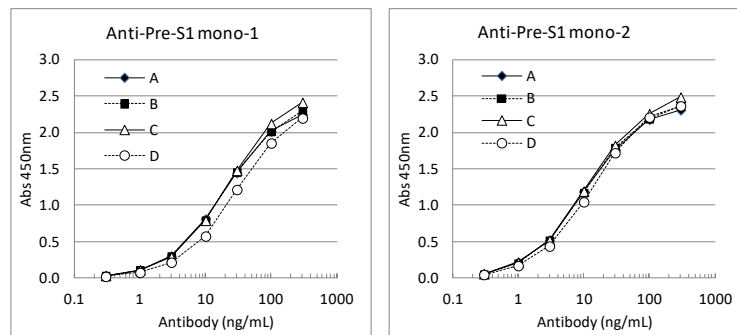
| Product # | Product name | Isotype |
|-------------|------------------------------------|---------|
| BCL-ABM1-01 | Anti-HBsAg-Pre-S1 Antibody, Mono-1 | IgG1 |
| BCL-ABM1-02 | Anti-HBsAg-Pre-S1 Antibody, Mono-2 | IgG1 |

Antigen specificity

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

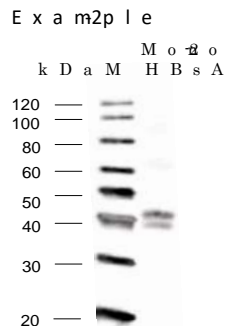
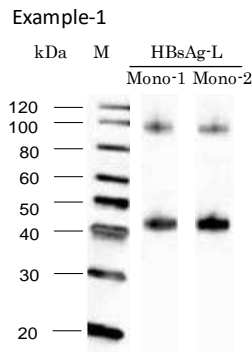
Genotype specificity

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



Examples

Western blot



Example-1

Sample: HBsAg-L protein (BCL-AGC-01, 5ng)
 Primary Antibody: Mono-1,-2 (100ng/mL)
 2nd antibody: anti-mouse rabbit-HRP
 Detection: ECL substrate
 Monomer and Dimer bands are detected

Example-2

Sample: purified HBsAg from human serum 500ng
 Primary Antibody: Mono-2 (100ng/mL)
 2nd antibody: anti-mouse rabbit-HRP
 Detection: ECL substrate
 L-protein is detected in human HBsAg.