

Anti-HBsAg Pre-S2, 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 and Pre-S2 is reportedly known to related HBV entry or carcinogenesis. Pre-S2 region is known to have variation of amino acid sequence depending on genotypes.

The present products are monoclonal antibody against Pre-S2 domain. Two products are listed.

General information

Source : mouse ascitic fluid, monoclonal
 Appearance : liquid form (PBS 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 (0.1 to 10 µg/mL), Western blot (0.1 to 10 µg/mL)

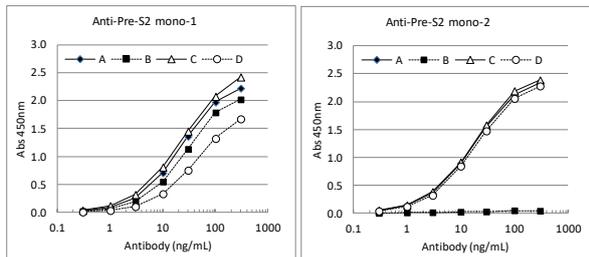
Product variation and product

Product #	Product name	clone	Isotype
BCL-ABM2-01	Anti-HBsAg-Pre-S2 Antibody, Mono-1	L4A7	IgG2b
BCL-ABM2-02	Anti-HBsAg-Pre-S2 Antibody, Mono-2	88F3	IgG1

Antigen specificity

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

Genotype specificity



BCL-ABM2-01 mono-1 binds to L antigen of all genotypes examined.

BCL-ABM2-02 mono-2 binds to L antigen of genotype A,B,C but not that of genotype B.

Examples

Western blot

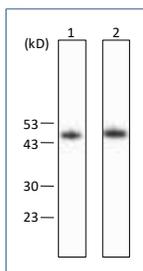


Figure shows results of western blot using these antibodies using HBsAg-L protein as a sample.

Antigen: HBsAg-Lprotein (Product#: BCL-AG-01) 10ng

Primary antibody:

Lane1: Anti-Pre-S2 antibody mono-1 (BCL-ABM2-01) at 0.1µg/mL

Lane2: Anti-Pre-S2 antibody mono-2 (BCL-ABM2-02) at 0.1µg/mL

Secondary antibody: Anti-mouse IgG Rabbit (HRP -labeled)

Detection: 1 min exposure

ELISA

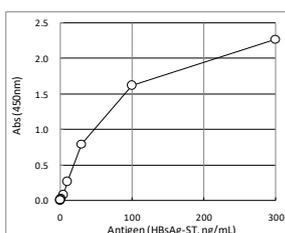


Figure shows results of ELISA using these antibodies using HBsAg-L protein ST type as a sample.

Solid Phase: Anti-Pre-S2 polyclonal antibody (BCL-ABP2-01) 10 µg/mL

Blocking: h-Block-e (BCL-BKHE-01)

Antigen: HBsAg-Lprotein ST type (BCL-AGS-02)

Detection: Anti-Pre-S2 antibody mono-1 (BCL-ABM2-01), HRP-labeled at 1 µg/mL

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