

## Hepatitis B Virus Surface Antigen L-protein-ST type (HBsAg L-protein ST, Recombinant)

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. Most of commercially available HBsAg is composed of either S-protein alone or a mixture of S- and M-proteins. HBV-infected patients generally possess antibody against S-protein, since most circulating antigen is S-protein.

HBsAg L-protein-ST type contains all the three components in one protein. The S-protein region, however, is so modified that the regular human antibody to S-protein does not recognize. The Pre-S1 and Pre-S2 region is intact and shows high antigen activity.

The Pre-S1 region is known to be the hepatic cell recognition site and to be important in the HBV infection. And Pre-S2 region is also known to play important role in HBV infection. Thus, the product can be used as a unique tool to investigate the mechanism of HBV infection as well as antigens for both Pre-S1 and Pre-S2. The product is also used as an antibody-escapable mimic antigen.

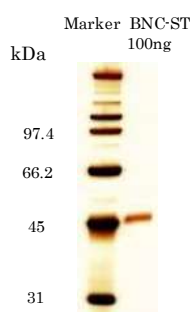
### General information

Source:	Yeast ( <i>Saccharomyces cerevisiae</i> )
Appearance:	Lyophilized white powder
Activity:	Pre-S1 activity is more than 1000 $\mu$ units/mg protein (One unit is an arbitrary scale which is determined by using Pre-S1 detecting ELISA kit sold by Beacle)
Structure:	Nano size particles having antigen protein floating in lipid bilayer. The mean particle size is 50 to 60nm as determined dynamic light scattering methods
Subtype:	adr (Two amino acids in S region are replaced by those seen in naturally occurring mutation)
Dissolve :	For 100 $\mu$ g vial, added 500 $\mu$ L of water to the vial that makes a antigen solution at 200 $\mu$ g/mL in PBS (137 mM NaCl, 8.1 mM Na <sub>2</sub> HPO <sub>4</sub> • 12H <sub>2</sub> O, 2.68 mM KCl, 1.47 mM KH <sub>2</sub> PO <sub>4</sub> , pH 7.2 - 7.4) containing 1% sucrose.
Purity:	over 95% (see SDS-PAGE)
Storage:	-20°C (3 years guarantee after dispatch)

### Product code

product#	product name
BCL-AGS-02	HBsAg L-protein ST type, recombinant

### SDS-PAGE



**Note:** HBsAg L-protein-ST type bind to plastic tubes. For dilution, please use protein-low bind tubes.

**About Product #:** Products with code# of BCL-AGS-01 is no longer available. The content and price of BCL-AGS-02 was changed. BCL-AGS-20 is produced upon request. For the detail visit our website.