Hepatitis B virus surface antigen, Pre-S2 peptides
(Recombinant)

Product #: Pre-S1 peptide: BCL-AGS2-01(no Tag), BCL-AGS2-21(Tagged)

The surface antigen of Hepatitis B virus (HBV) is composed of Pre-S1, Pre-S2, and S domains. The longest surface antigen, which has all the three domains, is called L protein, the middle sized antigen which has Pre-S2 and S domains, is called M protein, and the smallest one consisted of S domain is called S protein. S protein is generally also called HBsAg. Pre-S1 domain is known to be the target molecule of HBV receptors expressed on human hepatic cell surface. On the other hand, Pre-S2 domain is reportedly related to HBV invasion into cells and carcinogenesis. Thus, Pre-S1 and Pre-S2 domains are becoming more and more important in HBV research field.

The products are recombinant peptides having Pre-S2 domain. Two types of peptides are available; one has no tag peptide, and the other is fusion peptide with a tag-peptide. Chose either one suitable for your research purpose.

Production cell: E.coli
Product form: White lyophilized powder
content: 100 µg
Subtype: adr
Dissolution: Pour 100µL of DW to make 1000 µg/mL of protein in 1% sucrose containing PBS (137mM NaCl, 8.1mM Na2HPO4, 12H2O, 2.68mM KCl, 1.47mM KH2PO4, pH7.3).
purity: Over 95% (see blow SDS-PAGE)
Preservation: -20°C
Application: ELISA, WESTERN and others

Amino acid sequence:
BCL-AGS2-01(no tag):
AMADIGSMQWNSTTFHQALLDPRVRGLYFPAGGSSSGTVNPVPTTASPIGDPAPN
(56aa)

BCL-AGS2-21(tagged):
MSDKIIHLTDSETTVKLADGAILVDFWAEGCPCKMIAPILDIEIADEYQKLVKLNIQNDPGTAPIKYGIRGIPTTL
FKNGEVAATKVGLSOKQLKEFDANLAGGSIGSIDHIHHHISSGLPFRSGLMKTAAAKFERQNMDSFQDLGTDDDDKAMAD
IGSMQWNSTTFQALLDPRVRGLYFPAGGSSSGTVNPVPTTASPIGDPAPN
(214aa, underline Thioredoxin-His Tag)

Note: Pre-S2 peptides lack some amino acids (from 44 to 49), but it is well recognized by general anti-Pre-S2 antibodies.

SDS-PAGE:

(Tagged Pre-S2 peptide)

(Pres-S2 peptide)

(Silver stain)

(Coomassie stain)