

Recombinant Hepatitis B Surface Antigen (adw Mutant M-133-L)

DAG3936 HBV

Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	Recombinant Hepatitis B Surface Antigen (adw Mutant M-133-L)
Antigen Description	HBsAg is the surface antigen of the hepatitis B virus (HBV). It indicates current hepatitis B infection. The viral envelope of enveloped virus has different surface proteins from the rest of the virus which act as antigens. These antigens are recognized by
Description	Recombinant HBsAg adw antigen has a single mutation, replacing the methionine residue at position 133 with leucine.
Source	Pichia pastoris
Species	HBV
Form	Sterile-filtered solution containing 20 mM Na ₂ HPO ₄ , 0.03 M NaCl and 0.001% Thimerosal, pH 7.4.
Purity	Greater than 85% as determined by SDS-PAGE
Applications	immunogen

PACKAGING

Storage	Store at 4°C.
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BACKGROUND

Introduction	Hepatitis B is one of a few known non-retroviral viruses which employ reverse transcription as a part of its replication process. (HIV, a completely unrelated virus, also uses reverse transcription, but it is a retrovirus.) HBV invades the cell by binding to surface receptor and become internalized. The viral core particles then migrate to the hepatocyte nucleus and the partially double-stranded, relaxed circular genomes (RC-DNA) are repaired to form a covalently closed circular DNA (cccDNA), which is the template for viral genomic and sub-genomic RNAs by cellular RNA polymerase II. Of these, the pregenomic RNA (pgRNA) is selectively packaged into progeny capsids and is then reverse-transcribed into new RC-DNA. The core can either bud into the endoplasmic reticulum to be enveloped or exported from the cell or recycled back into the genome for conversion to cccDNA.
Keywords	HBsAg protein; HBsAg protein; HBV major surface antigen protein; HBV surface antigen protein; S protein; S protein; HBsAg; HBsAg preS2

REFERENCES

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