

## Recombinant Hepatitis B Surface Antigen (adw Mutant K-141-E)

DAG3934 HBV

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product overview</b>	Recombinant Hepatitis B Surface Antigen (adw Mutant K-141-E)
<b>Antigen Description</b>	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
<b>Description</b>	Recombinant HBsAg adw antigen has a single mutation, lysine residue at position 141 replaced with glutamate.
<b>Source</b>	Pichia pastoris
<b>Species</b>	HBV
<b>Form</b>	Sterile-filtered solution containing 20 mM Na <sub>2</sub> HPO <sub>4</sub> , 0.03 M NaCl and 0.001% Thimerosal, pH 7.4.
<b>Purity</b>	Greater than 85% as determined by SDS-PAGE
<b>Applications</b>	immunogen

### PACKAGING

<b>Storage</b>	Store at 4°C.
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### BACKGROUND

<b>Introduction</b>	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.
<b>Keywords</b>	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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