### Description

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Recombinant Hepatitis B Surface Antigen (Adw) protein (Active)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expression system</strong></td>
<td>Pichia pastoris</td>
</tr>
<tr>
<td><strong>Accession</strong></td>
<td>Q773S4</td>
</tr>
<tr>
<td><strong>Protein length</strong></td>
<td>Full length protein</td>
</tr>
<tr>
<td><strong>Animal free</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Nature</strong></td>
<td>Recombinant</td>
</tr>
<tr>
<td><strong>Predicted molecular weight</strong></td>
<td>24 kDa</td>
</tr>
<tr>
<td><strong>Amino acids</strong></td>
<td>56 to 281</td>
</tr>
</tbody>
</table>

**Additional sequence information**: The protein contains immunodominant region of HBV surface antigen adw1 subtype.

### Specifications

Our [Abpromise guarantee](#) covers the use of **ab91276** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications**

- HPLC
- Western blot
- ELISA
- SDS-PAGE

**Form**

- Liquid

**Additional notes**

ab91276 contains the Hepatitis B Virus Surface Antigen immunodominant region.

### Preparation and Storage

**Stability and Storage**

Shipped at 4°C. Store at 4°C (stable for up to 12 months). Upon delivery aliquot. Store at +4°C. Do Not Freeze.

- **pH**: 9.30
- **Constituents**: 0.58% Sodium chloride, PBS, 0.21% Sodium carbonate, 0.09% EDTA, 15% Glycerol

This product is an active protein and may elicit a biological response in vivo, handle with caution.
Hepatitis B Virus (HBV) infection induces a disease state characterised by liver damage, inflammation and viral persistence. Infection also increases the risk of hepatocellular carcinoma. HBV belongs to the Hepadnaviridae family of viruses. Its genome consists of partially double stranded circular DNA. The DNA is enclosed in a nucleocapsid, or core antigen (HBCAg), which is surrounded by a spherical envelope (surface antigen or HBsAg). The core antigen shares its sequences with the e antigen (HBeAg) but no cross reactivity between the two proteins has been observed. The HBV genome also encodes a DNA polymerase that also acts as a reverse transcriptase. Hepatitis B infection is normally diagnosed from serological tests that detect HBsAg but as the disease progresses this antigen may no longer be present in the blood and tests for HBCAg are used. If HBsAg can be detected in the blood for longer than six months, chronic hepatitis B is diagnosed. The antigenic determinant of the protein moiety of the HBsAg determines specific characteristics of different serotypes and provides the basis of immunodetection. HBsAg has antigenic heterogeneity, specifically, two pairs of sub specific determinants, d/y and w/r allow the following combinations: adw, ayw, adr, ayr.

Membrane Virion

SDS-PAGE analysis of ab91276.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"
Extensive multi-media technical resources to help you
We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors