## Product datasheet

### Natural Human Hemoglobin A1c protein ab98306

**Overview**

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Natural Human Hemoglobin A1c protein</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protein length</strong></td>
<td>Full length protein</td>
</tr>
</tbody>
</table>

**Description**

<table>
<thead>
<tr>
<th><strong>Nature</strong></th>
<th>Native</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
<td>Native</td>
</tr>
</tbody>
</table>

**Amino Acid Sequence**

<table>
<thead>
<tr>
<th><strong>Accession</strong></th>
<th>P69905</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species</strong></td>
<td>Human</td>
</tr>
<tr>
<td><strong>Molecular weight</strong></td>
<td>15 kDa</td>
</tr>
<tr>
<td><strong>Amino acids</strong></td>
<td>2 to 142</td>
</tr>
</tbody>
</table>

**Specifications**

Our Abpromise guarantee covers the use of ab98306 in the following tested applications.

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

**Applications**

<table>
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<tr>
<th>SDS-PAGE</th>
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</table>

**Purity**

96%.

ab98306 was sterile filtered through a 0.2µm membrane. Purity >96% as determined by FPLC using a Mono S Haemoglobin A1c column (dispensing solution).

**Form**

Liquid

**Additional notes**

Starting material donor tested and found negative for HIV I & II antibodies, Hepatitis B surface antigen, and Hepatitis C antibodies.

**Preparation and Storage**

**Stability and Storage**

Shipped on dry ice. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Proprietary buffer formulation, pH 8.0.

**General Info**
**Function**
Involved in oxygen transport from the lung to the various peripheral tissues.
LVV-hemorphin-7 potentiates the activity of bradykinin, causing a decrease in blood pressure.
Spinorphin: functions as an endogenous inhibitor of enkephalin-degrading enzymes such as DPP3, and as a selective antagonist of the P2RX3 receptor which is involved in pain signaling, these properties implicate it as a regulator of pain and inflammation.

**Tissue specificity**
Red blood cells.

**Involvement in disease**
Heinz body anemias
Beta-thalassemia
Sickle cell anemia
Beta-thalassemia, dominant, inclusion body type

**Sequence similarities**
Belongs to the globin family.

**Post-translational modifications**
Glucose reacts non-enzymatically with the N-terminus of the beta chain to form a stable ketoamine linkage. This takes place slowly and continuously throughout the 120-day life span of the red blood cell. The rate of glycation is increased in patients with diabetes mellitus.
S-nitrosylated; a nitric oxide group is first bound to Fe(2+) and then transferred to Cys-94 to allow capture of O(2).
Acetylated on Lys-60, Lys-83 and Lys-145 upon aspirin exposure. PubMed:16916647 reports the identification of HBB acetylated on Lys-145 in the cytosolic fraction of HeLa cells. This may have resulted from contamination of the sample.

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**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"