**Product datasheet**

**Recombinant sheep Growth Hormone protein ab68387**

### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Recombinant sheep Growth Hormone protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein length</td>
<td>Full length protein</td>
</tr>
</tbody>
</table>

### Description

<table>
<thead>
<tr>
<th>Nature</th>
<th>Recombinant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Escherichia coli</td>
</tr>
<tr>
<td>Amino Acid Sequence</td>
<td>Sheep</td>
</tr>
<tr>
<td>Species</td>
<td>Sheep</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>22 kDa</td>
</tr>
</tbody>
</table>

### Specifications

Our [Abpromise guarantee](#) covers the use of ab68387 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Biological activity**

Activity determined by the dose-dependant stimulation of the proliferation FDCP13B9 cells.

**Applications**

Functional Studies

SDS-PAGE

**Purity**

> 95% SDS-PAGE.

ab68387 is purified by proprietary chromatographic techniques.

**Form**

Lyophilised

### Preparation and Storage

**Stability and Storage**

Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

Constituent: 0.00004% Sodium bicarbonate

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Reconstitution**

It is recommended to reconstitute in sterile 18MO-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Function
Plays an important role in growth control. Its major role in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1. It stimulates both the differentiation and proliferation of myoblasts. It also stimulates amino acid uptake and protein synthesis in muscle and other tissues.

Involvement in disease
Defects in GH1 are a cause of growth hormone deficiency isolated type 1A (IGHD1A) [MIM:262400]; also known as pituitary dwarfism I. IGHD1A is an autosomal recessive deficiency of GH which causes short stature. IGHD1A patients have an absence of GH with severe dwarfism and often develop anti-GH antibodies when given exogenous GH.
Defects in GH1 are a cause of growth hormone deficiency isolated type 1B (IGHD1B) [MIM:612781]; also known as dwarfism of Sindh. IGHD1B is an autosomal recessive deficiency of GH which causes short stature. IGHD1B patients have low but detectable levels of GH. Dwarfism is less severe than in IGHD1A and patients usually respond well to exogenous GH.
Defects in GH1 are the cause of Kowarski syndrome (KWKS) [MIM:262650]; also known as pituitary dwarfism VI.
Defects in GH1 are a cause of growth hormone deficiency isolated type 2 (IGHD2) [MIM:173100]. IGHD2 is an autosomal dominant deficiency of GH which causes short stature. Clinical severity is variable. Patients have a positive response and immunologic tolerance to growth hormone therapy.

Sequence similarities
Belongs to the somatotropin/prolactin family.

Cellular localization
Secreted.