**Product datasheet**

**Recombinant Human Antithrombin III / ATIII protein ab157920**

### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Recombinant Human Antithrombin III / ATIII 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>Wheat germ</td>
</tr>
<tr>
<td>Species</td>
<td>Human</td>
</tr>
</tbody>
</table>

#### Amino Acid Sequence

<table>
<thead>
<tr>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>MYSNVIGTVSGKRKVYLLLLIGFWDCVTCHGSPVDI CTAEPRDIPMN PMCYRSPEKKATEDEGSEQKIPEATNRRWELSKAN SRFATTFYQLAD SKNDNDNIFLSPLSISTAFAMTKLGACNDTLQQLMEVF KFDTISEKTSDO IHFFAKLNCRLYRKANKSSKLVSANRLFGDKSLTFND LYVSDAFHKAFL EVNEEGSEAATAVVIAGRSLNPVRVTFKANRPFLLV FIREVPLNTIFM GRVANPCVK</td>
</tr>
</tbody>
</table>

| Amino acids | 1 to 259 |
| Tags | proprietary tag N-Terminus |

### Specifications

Our **Abpromise guarantee** covers the use of **ab157920** in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

#### Applications

- ELISA
- Western blot

#### Form

- Liquid

#### Additional notes

- Protein concentration is above or equal to 0.05 mg/ml.
- Previously labelled as Antithrombin III.
Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00
Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function

Most important serine protease inhibitor in plasma that regulates the blood coagulation cascade. AT-III inhibits thrombin as well as factors IXa, Xa and Xla. Its inhibitory activity is greatly enhanced in the presence of heparin.

Tissue specificity

Found in plasma.

Involvement in disease

Defects in SERPINC1 are the cause of antithrombin III deficiency (AT3D) [MIM:613118]. AT3D is an important risk factor for hereditary thrombophilia, a hemostatic disorder characterized by a tendency to recurrent thrombosis. AT3D is classified into 4 types. Type I: characterized by a 50% decrease in antigenic and functional levels. Type II: has defects affecting the thrombin-binding domain. Type III: alteration of the heparin-binding domain. Plasma AT-III antigen levels are normal in type II and III. Type IV: consists of miscellaneous group of unclassifiable mutations.

Sequence similarities

Belongs to the serpin family.

Post-translational modifications

Phosphorylation sites are present in the extracellular medium.

Cellular localization

Secreted > extracellular space.

Images

ab157920 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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