### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Native Human Apolipoprotein A I</th>
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<tbody>
<tr>
<td>Protein length</td>
<td>Full length protein</td>
</tr>
</tbody>
</table>

### Description

<table>
<thead>
<tr>
<th>Nature</th>
<th>Native</th>
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<tbody>
<tr>
<td>Source</td>
<td>Native</td>
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<tr>
<td>Amino Acid Sequence</td>
<td>Native</td>
</tr>
<tr>
<td>Species</td>
<td>Human</td>
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</tbody>
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### Specifications

Our Abpromise guarantee covers the use of ab90760 in the following tested applications.

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

**Applications**  
SDS-PAGE

**Purity**  
> 95% SDS-PAGE.

**Form**  
Liquid

**Additional notes**  
Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.

### Preparation and Storage

**Stability and Storage**  
Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.  
pH: 7.40  
Constituent: 0.079% Ammonium bicarbonate

### General Info

**Function**  
Participates in the reverse transport of cholesterol from tissues to the liver for excretion by promoting cholesterol efflux from tissues and by acting as a cofactor for the lecithin cholesterol
Tissue specificity
Major protein of plasma HDL, also found in chylomicrons. Synthesized in the liver and small intestine.

Involvement in disease
Defects in APOA1 are a cause of high density lipoprotein deficiency type 2 (HDLD2) [MIM:604091]; also known as familial hypoalphalipoproteinemia (FHA). Inheritance is autosomal dominant.

Defects in APOA1 are a cause of the low HDL levels observed in high density lipoprotein deficiency type 1 (HDLD1) [MIM:205400]; also known as analphalipoproteinemia or Tangier disease (TGD). HDLD1 is a recessive disorder characterized by the absence of plasma HDL, accumulation of cholesteryl esters, premature coronary artery disease, hepatosplenomegaly, recurrent peripheral neuropathy and progressive muscle wasting and weakness. In HDLD1 patients, ApoA-I fails to associate with HDL probably because of the fault of the conversion of pro-ApoA-I molecules into mature chains, either due to a defect in the converting enzyme activity or a specific structural defect in Tangier ApoA-I.

Defects in APOA1 are the cause of amyloid polyneuropathy-nephropathy Iowa type (AMYLIOWA) [MIM:107680]; also known as amyloidosis van Allen type or familial amyloid polyneuropathy type III. AMYLIOWA is a hereditary generalized amyloidosis due to deposition of amyloid mainly constituted by apolipoprotein A1. The clinical picture is dominated by neuropathy in the early stages of the disease and nephropathy late in the course. Death is due in most cases to renal amyloidosis. Severe peptic ulcer disease can occur in some and hearing loss is frequent. Cataracts is present in several, but vitreous opacities are not observed.

Defects in APOA1 are a cause of amyloidosis type 8 (AMYL8) [MIM:105200]; also known as systemic non-neuropathic amyloidosis or Ostertag-type amyloidosis. AMYL8 is a hereditary generalized amyloidosis due to deposition of apolipoprotein A1, fibrinogen and lysozyme amyloids. Viscera are particularly affected. There is no involvement of the nervous system. Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension, hepatosplenomegaly, cholestasis, petechial skin rash.

Sequence similarities
Belongs to the apolipoprotein A1/A4/E family.

Post-translational modifications
Palmitoylated.

Phosphorylation sites are present in the extracellular medium.

Cellular localization
Secreted.

Images
SDS-PAGE analysis of ab90760 on a 4-12% Bis-Tris NuPAGE gel
Lane 1: Apolipoprotein A I - 5 μg (reduced /heated)
Lane 2: Apolipoprotein A I - 10 μg (reduced/ heated)
Lane 3: Apolipoprotein A I - 20 μg (reduced /heated)
Lane 4: Molecular weight markers
Lane 5: Apolipoprotein A I - 5 μg (non-reduced/no heat)
Lane 6: Apolipoprotein A I - 10 μg (non-reduced/no heat)
Lane 7: Apolipoprotein A I - 20 μg (non-reduced /no heat)

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

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