**Overview**

**Product name**
Human Albumin ELISA Kit

**Detection method**
Colorimetric

**Precision**

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td>4.4%</td>
</tr>
</tbody>
</table>

**Intra-assay**

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>

**Inter-assay**

**Sample type**
Cell culture supernatant, Saliva, Milk, Urine, Cerebrospinal Fluid

**Assay type**
Sandwich (quantitative)

**Sensitivity**
= 1.9 ng/ml

**Range**
3.125 ng/ml - 200 ng/ml

**Recovery**
97 %

**Assay time**
3h 00m

**Assay duration**
Multiple steps standard assay

**Species reactivity**
Reacts with: Human

**Product overview**

Human Albumin ELISA kit is designed for the quantitative measurement of albumin levels in urine, saliva, milk, cerebrospinal fluids and cell culture samples.

An albumin specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently an albumin specific biotinylated detection antibody is added and then followed by washing with wash buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of albumin captured in plate.
Get results in 90 minutes with Human Albumin ELISA Kit (ab179887) from our SimpleStep ELISA® range.

**Please note:** For both the 10X Diluent N Concentrate and 20X Wash Buffer Concentrate, please ensure to mix well by inversion before use to avoid precipitation.

**Tested applications**

**Suitable for:** Sandwich ELISA

**Platform**

Microplate

**Properties**

**Storage instructions**

Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>100X Streptavidin-Peroxidase Conjugate</td>
<td>1 x 80µl</td>
</tr>
<tr>
<td>10X Diluent N Concentrate</td>
<td>1 x 30ml</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>2 x 30ml</td>
</tr>
<tr>
<td>30X Biotinylated Human Albumin Antibody</td>
<td>1 x 180µl</td>
</tr>
<tr>
<td>Albumin Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Albumin Standard</td>
<td>1 vial</td>
</tr>
<tr>
<td>Chromogen Substrate</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>Sealing Tapes</td>
<td>3 units</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

**Function**

Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood. Major zinc transporter in plasma, typically binds about 80% of all plasma zinc.

**Tissue specificity**

Plasma.

**Involvement in disease**

Defects in ALB are a cause of familial dysalbuminemic hyperthyroxinemia (FDH) [MIM:103600]. FDH is a form of euthyroid hyperthyroxinemia that is due to increased affinity of ALB for T(4). It is the most common cause of inherited euthyroid hyperthyroxinemia in Caucasian population.

**Sequence similarities**

Belongs to the ALB/AFP/VDB family.

Contains 3 albumin domains.

**Post-translational modifications**

Kenitra variant is partially O-glycosylated at Thr-620. It has two new disulfide bonds Cys-600 to Cys-602 and Cys-601 to Cys-606.

Glycated in diabetic patients.

Phosphorylation sites are present in the extracellular medium.

Acetylated on Lys-223 by acetylsalicylic acid.
Cellular localization
Secreted.

Applications
Our Abpromise guarantee covers the use of ab108788 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Images

Concentration of albumin from differently diluted (in parenthesis) samples, demonstrating a linearity of 84-90% in CSF and 88-111% in milk (duplicates; +/- SD).

Albumin in HepG2 (diluted 1:50-200) and HeLa (undiluted) supernatants, heparin-treated plasma and serum (5e5-5e6), urine (100-500), milk (5000-30000), saliva (200-2000) was measured in duplicates (+/- SD).
ab108788 Albumin Human ELISA kit

Standard curve with background signal subtracted (duplicates; +/- SD).

ab108788 Human Albumin

Human albumin measured in various samples showing mass (microgram) per mL sample tested

Representative Standard Curve using ab108788

Typical Standard Curve

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- 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