Human Albumin ELISA Kit ab108788

Overview

Product name: Human Albumin ELISA Kit
Detection method: Colorimetric

<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>5.7%</td>
</tr>
</tbody>
</table>

<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>9.9%</td>
</tr>
</tbody>
</table>

Sample type: Cell culture supernatant, Saliva, Milk, Urine, Cerebral Spinal Fluid
Assay type: Sandwich (quantitative)

Sensitivity = 0.72 ng/ml
Range: 12.5 ng/ml - 100 ng/ml
Recovery: 97%
Assay time: 3h 00m
Assay duration: Multiple steps standard assay

Reacts with: Human

Product overview:

Human Albumin ELISA kit (ab108788) is a sandwich ELISA kit 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.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

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.

**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).**

**Standard curve with background signal subtracted (duplicates; +/- SD).**
Human albumin measured in various samples showing mass (microgram) per mL sample tested

Representative Standard Curve using ab108788

Typical Standard Curve for ab108788 Human Albumin ELISA kit

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