# abcam

# Product datasheet

# Human Albumin ELISA Kit ab 108788

# ★★★★★ 1 Abreviews 51 References 3 Images

#### Overview

Product name Human Albumin ELISA Kit

**Detection method**Colorimetric

Precision

Sample	n	Mean	SD	CV%
Overall				5.9%

Inter-assay

Intra-assav

Sample	n	Mean	SD	CV%
Overall				10.4%

Sample type Cell culture supernatant, Saliva, Milk, Urine, Tissue, Cell Lysate, Cerebral Spinal Fluid

Assay type Sandwich (quantitative)

**Sensitivity** = 0.79 ng/ml

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

Recovery 99 %

Assay time 3h 00m

Assay duration Multiple steps standard assay

Species reactivity 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, CSF, cell culture supernatants, cell lysate and

tissue 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.

1

Get results in 90 minutes with Human Albumin ELISA Kit ( $\underline{ab179887}$ ) 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 concentration of the biotinylated antibody varies by lot: 30X, 40X, 50X, etc. The stock Biotinylated Albumin Antibody must be diluted with 1X Diluent N to prepare 1X Biotinylated Albumin Antibody for use in the assay procedure. Observe the label for the "X" concentration on the vial of Biotinylated Albumin Antibody.

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.

Components	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
20X Wash Buffer Concentrate	2 x 30ml
25X Biotinylated Human Albumin Antibody	1 x 150µl
Albumin Microplate (12 x 8 well strips)	1 unit
Albumin Standard	1 vial
Chromogen Substrate	1 x 7ml
Sealing Tapes	3 units
Stop Solution	1 x 11ml

**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.

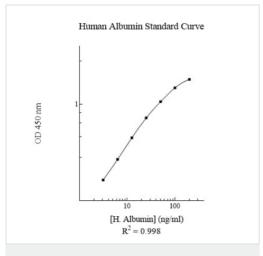
Phosphorylation sites are present in the extracelllular medium.

Acetylated on Lys-223 by acetylsalicylic acid.

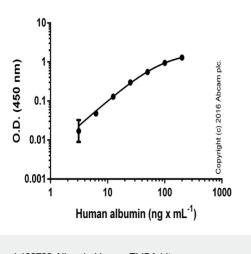
**Cellular localization** 

Secreted.

# **Images**

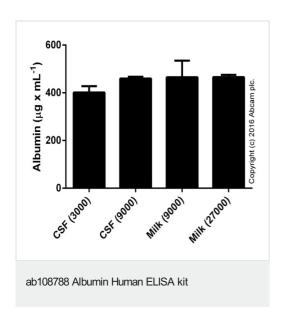


Typical Standard Curve for ab108788 Human Albumin ELISA kit



ab108788 Albumin Human ELISA kit

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



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

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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors