Human Ferritin (FTL) ELISA Kit ab108837

Overview

Product name: Human Ferritin (FTL) 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>4.9%</td>
</tr>
</tbody>
</table>

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<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>7.2%</td>
</tr>
</tbody>
</table>

Sample type: Cell culture supernatant, Milk, Urine, Serum, Plasma, Cerebral Spinal Fluid
Assay type: Sandwich (quantitative)
Sensitivity: = 1.5 ng/ml
Range: 1.563 ng/ml - 50 ng/ml
Recovery: 97%
Assay time: 4h 0m
Assay duration: Multiple steps standard assay
Species reactivity:

Predicted to work with: Monkey

Product overview:

Abcam’s Ferritin (FTL) Human in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Ferritin concentrations in plasma, serum, milk, cerebrospinal fluid and cell culture supernatants.

A Ferritin specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Ferritin specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Complex is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase 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 Ferritin captured in plate.

Get results in 90 minutes with Human Ferritin ELISA Kit (FLT) (ab200018) from our SimpleStep ELISA® range.

**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 M Concentrate</td>
<td>1 x 20ml</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>2 x 30ml</td>
</tr>
<tr>
<td>50X Biotinylated Human Ferritin Antibody</td>
<td>1 x 120µl</td>
</tr>
<tr>
<td>Chromogen Substrate</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>Ferritin Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Ferritin Standard</td>
<td>1 vial</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**

Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Also plays a role in delivery of iron to cells. Mediates iron uptake in capsule cells of the developing kidney.

**Involvement in disease**

Defects in FTL are the cause of hereditary hyperferritinemia-cataract syndrome (HHCS) [MIM:600886]. It is an autosomal dominant disease characterized by early-onset bilateral cataract. Affected patients have elevated level of circulating ferritin. HHCS is caused by mutations in the iron responsive element (IRE) of the FTL gene.

Defects in FTL are the cause of neurodegeneration with brain iron accumulation type 3 (NBIA3) [MIM:606159]; also known as adult-onset basal ganglia disease. It is a movement disorder with heterogeneous presentations starting in the fourth to sixth decade. It is characterized by a variety of neurological signs including parkinsonism, ataxia, corticospinal signs, mild nonprogressive cognitive deficit and episodic psychosis. It is linked with decreased serum ferritin levels.

**Sequence similarities**

Belongs to the ferritin family.

Contains 1 ferritin-like diiron domain.

**Applications**
Our Abpromise guarantee covers the use of ab108837 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 dilution.</td>
</tr>
</tbody>
</table>

Images

Human Ferritin measured in biological fluids showing quantity (pg) per mL of tested sample. Serum and plasma samples were diluted 10-20 fold. Milk, urine and PBMC supernatant were diluted 1-4 fold.

Human Ferritin standard curve: mean of duplicates (+/- SD)
Representative Standard Curve using ab108837

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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