Product datasheet

Human Insulin like Growth Factor 1 ELISA Kit (IGF1) ab108873

Overview

Product name: Human Insulin like Growth Factor 1 ELISA Kit (IGF1)
Detection method: Colorimetric

<table>
<thead>
<tr>
<th>Precision</th>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra-assay</td>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td>4.9%</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>Inter-assay</td>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample type: Cell culture supernatant, Serum, Plasma
Assay type: Sandwich (quantitative)
Sensitivity: > 0.3 ng/ml
Range: 0.375 ng/ml - 24 ng/ml
Recovery: = 98%
Assay time: 5h 00m
Assay duration: Multiple steps standard assay
Species reactivity: Reacts with: Human

Product overview:

Abcam's Insulin like Growth Factor 1 (IGF1) Human in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Insulin like Growth Factor 1 concentrations in Human cell culture supernatants, serum and plasma.

An Insulin like Growth Factor 1 specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently an Insulin like Growth Factor 1 specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate 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 Insulin like Growth Factor 1 captured in plate.

Get results in 90 minutes with Human IGF1 ELISA Kit (ab211651) from our SimpleStep ELISA® range.

**Tested applications**

**Platform**

Suitable for: Sandwich ELISA  
Microplate

**Properties**

**Storage instructions**

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>1X Plasma/Serum Pretreatment Buffer</td>
<td>1 x 7.5ml</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>2 x 30ml</td>
</tr>
<tr>
<td>70X Biotinylated Human Insulin like Growth Factor 1 Antibody</td>
<td>1 x 90µl</td>
</tr>
<tr>
<td>Chromogen Substrate</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>Insulin like Growth Factor 1 Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Insulin like Growth Factor 1 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**

The insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake.

**Involvement in disease**

Defects in IGF1 are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) [MIM:608747]. IGF1 deficiency is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness and mental retardation.

**Sequence similarities**

Belongs to the insulin family.

**Cellular localization**

Secreted.

**Applications**

Our Abpromise guarantee covers the use of ab108873 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

Representative Standard Curve using ab108873.

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