



Product datasheet

Human IGF1 ELISA Kit ab100545

★★★★★ [2 Abreviews](#) [23 References](#) [3 Images](#)

Overview

Product name	Human IGF1 ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Overall				< 10%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Overall				< 12%
Sample type	Cell culture supernatant, Serum, Plasma				
Assay type	Sandwich (quantitative)				
Sensitivity	< 0.2 ng/ml				
Range	0.1 ng/ml - 30 ng/ml				
Recovery	97 %				
	Sample specific recovery				
	Sample type		Average %		Range
	Cell culture supernatant		102.5		98% - 110%
	Serum		119.6		105% - 138%
	Plasma		105.4		81% - 121%
Assay duration	Multiple steps standard assay				
Species reactivity	Reacts with: Human				
Product overview	Abcam's IGF1 Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an <i>in vitro</i> enzyme linked immunosorbent assay for the quantitative measurement of Human IGF1 in serum, plasma, and cell culture supernatants.				

This ELISA kit can only detect the free form of human IGF-1. It does not detect the complex or bound forms such as IGFBP-bound IGF1.

This assay employs an antibody specific for Human IGF1 coated on a 96-well plate. Standards and samples are pipetted into the wells and IGF1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human IGF1 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IGF1 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

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

Notes

Optimization may be required with urine samples

Platform

Microplate

Properties

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

Components	1 x 96 tests
120X HRP-Streptavidin Concentrate	1 x 200µl
20X Wash Buffer	1 x 25ml
Assay Diluent C	2 x 30ml
Biotinylated anti-Human IGF-1	2 vials
IGF-1 Microplate (12 strips x 8 wells)	1 unit
Recombinant Human IGF1 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

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

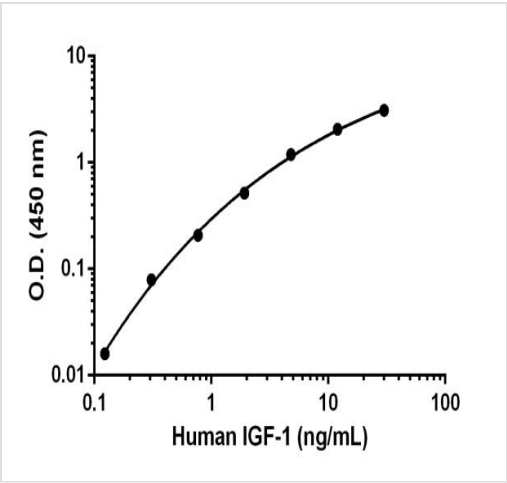
Defects in IGF1 are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) [MIM:608747]. IGF1 deficiency is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness and mental retardation.

Sequence similarities

Belongs to the insulin family.

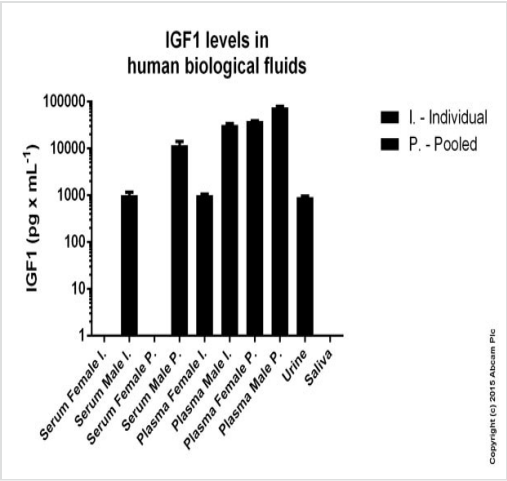
Cellular localization

Secreted.



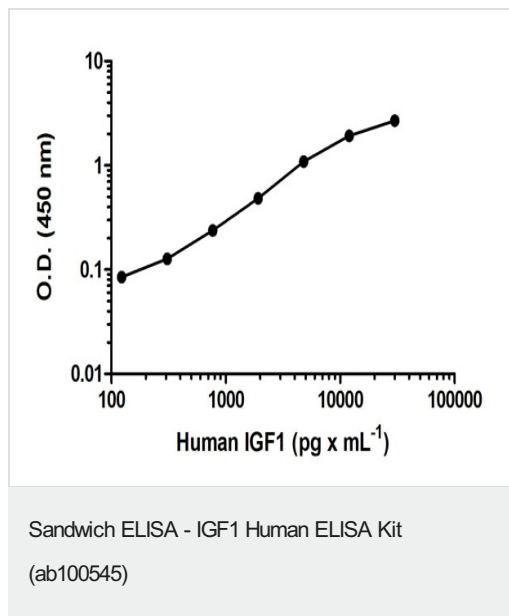
Typical Standard Curve

Representative standard curve using ab100545.



Sandwich ELISA - IGF1 Human ELISA Kit
(ab100545)

IGF1 measured in biological fluids showing quantity (pg) per mL of tested sample. Samples were diluted 1-64 fold.



Human IGF1 standard curve: mean of 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 <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