abcam

Product datasheet

Human IGFBP3 ELISA Kit ab211652

איל-שעבע SimpleStep ELISA

4 References 画像数 8

製品の概要

製品名 Human IGFBP3 ELISA Kit

検出方法 Colorimetric

再現性 Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%
Serum	8			3.1%

Inter-Assay(日差再現性)

サンプル	N	平均值	SD	CV%	
Serum	3			6.5%	

サンプルの種類 Cell culture supernatant, Serum, Plasma

アッセイタイプ Sandwich (quantitative)

検出感度 86.6 pg/ml

検出範囲 122 pg/ml - 7800 pg/ml

添加回収試験 特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Cell culture supernatant	100	97% - 103%
Serum	110	107% - 114%
Hep Plasma	96	85% - 106%
EDTA Plasma	104	104% - 104%
Cit plasma	104	98% - 109%

全工程の試験時間 1h 30m

ステップ One step assay

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種交差性

製品の概要

交差種: Human

Human IGFBP3 ELISA Kit (ab211652) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IGFBP3 protein in cell culture supernatant, plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IGFBP3 with 86.6 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

特記事項

Insulin like growth factor binding protein 3 (IGFBP3) belongs to the family of insulin like growth factor (IGF) binding proteins. IGFBP3 is the main IGF binding protein in plasma, and forms a complex with IGF-I or IGF-II and an acid-labile subunit. IGFBP3 is expressed in multiple tissues, where together with IGFs, they play important roles in glucose homeostasis, cell survival, cell growth and differentiation. The concentrations of IGFBP3 are altered in disease states like type I diabetes, where urinary levels are increased during microalbuminuria, and in prostate cancer, where IGFBP3 protein levels decrease.

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

製品の特性

保存方法

Store at +4°C. Please refer to protocols.

内容	1 x 96 tests
10X Human IGFBP3 Capture Antibody	1 x 600µl
10X Human IGFBP3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human IGFBP3 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
	'

内容	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

機能 IGF-binding proteins prolong the half-life of the IGFs and have been shown to either inhibit or

stimulate the growth promoting effects of the IGFs on cell culture. They alter the interaction of IGFs

with their cell surface receptors.

組織特異性 Expressed by most tissues. Present in plasma.

配列類似性 Contains 1 IGFBP N-terminal domain.

Contains 1 thyroglobulin type-1 domain.

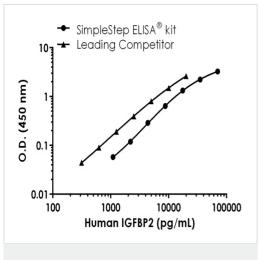
発生段階 IGFBP3 levels are higher during extrauterine life and peak during puberty.

ドメイン The thyroglobulin type-1 domain mediates interaction with HN. 翻訳後修飾 Phosphorylation sites are present in the extracelllular medium.

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細胞内局在 Secreted.

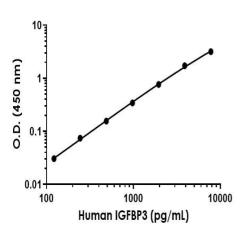
画像



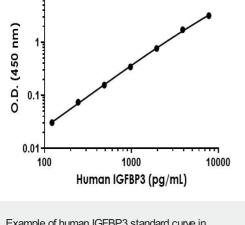
Human IGFBP3 standard curve comparison data.

Standard curve comparison between human IGFBP3 SimpleStep ${\sf ELISA}^{\circledR}$ kit and traditional ELISA kit from leading competitor.

SimpleStep ELISA kit shows comparable sensitivity.



Example of human IGFBP3 standard curve in Sample Diluent NS.

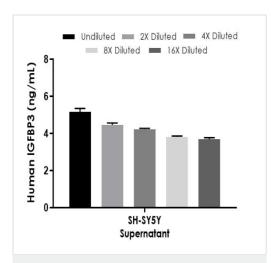


Undiluted 2X Diluted 4X Diluted 8X Diluted 16X Diluted 3000 Human IGFBP3 (ng/ml) 2000 1000 Plasma-Plasma-Plasma-Serum Citrate Heparin **EDTA**

Interpolated concentrations of native IGFBP3 in human serum and plasma samples.

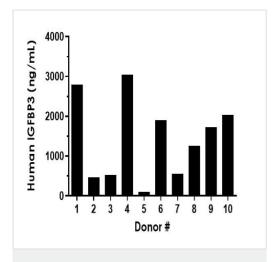
Background-subtracted data values (mean +/- SD) are graphed.

The concentrations of IGFBP3 were measured in duplicates, interpolated from the IGFBP3 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:300, plasma (citrate) 1:300, plasma (heparin) 1:333, and plasma (EDTA) 1:500. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IGFBP3 concentration was determined to be 2,161 ng/mL in serum, 2,175 ng/mL in plasma (citrate), 822 ng/mL in plasma (heparin), and 1,944 ng/mL in plasma (EDTA).



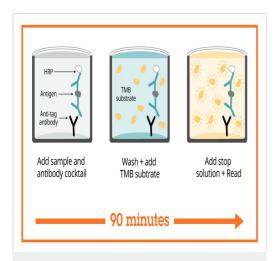
Interpolated concentrations of native IGFBP3 in SH-SY5Y supernatant samples.

The concentrations of IGFBP3 were measured in duplicates, interpolated from the IGFBP3 standard curves and corrected for sample dilution. Undiluted samples are as follows: SH-SY5Y supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IGFBP3 concentration was determined to be 4.28 ng/ml in SH-SY5Y supernatant.

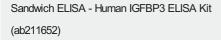


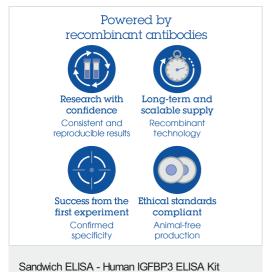
Serum from ten individual healthy human male donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IGFBP3 concentration was determined to be 1442 ng/mL with a range of 104 - 3,095 ng/mL.



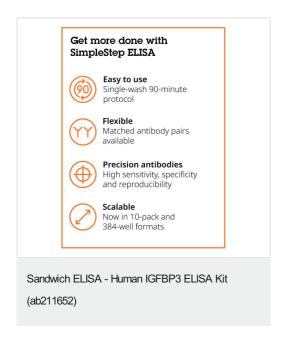
SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.





To learn more about the advantages of recombinant antibodies see **here**.

(ab211652)



To learn more about the advantages of SimpleStep ELISA[®] kits see **here**.

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