

Datasheet for ABIN411288

## IGFBPI ELISA Kit



[Go to Product page](#)

1 Image

2 Publications

### Overview

Quantity:	96 tests
Target:	IGFBPI
Binding Specificity:	AA 26-259
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human IGFBP-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: A26-N259
Specificity:	Expression system for standard: NSO Immunogen sequence: A26-N259
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity:	<1pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

Target:	IGFBPI
Alternative Name:	IGFBP1 ( <a href="#">IGFBPI Products</a> )
Background:	<p>Protein Function: 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. Promotes cell migration. .</p> <p>Background: IGFBP1 is also known as amniotic fluid binding protein(AFBP), placental protein-12, alpha-pregnancy-associated endometrial globulin, growth hormone independent binding protein, binding protein-28, binding protein-26, and binding protein-25. The low-molecular weight insulin-like growth-factor binding protein(IGF-BP25) is synthesized by human liver, secretory endometrium and decidua, and is also present in human serum. It binds insulin-like growth factors IGF-I and IGF-II with high affinity, and is proposed to act as a paracrine regulator of cell growth. These IGF-binding proteins are expressed at different concentrations in different tissues and are thought to regulate the activity of IGF I and II. The gene is organized in four exons and spans 5.9 kb. The IBP-1 gene is a single copy gene, located on chromosome 7. The standard product used in this kit is recombinant human IGFBP-1, consisting of 234 amino acids with the molecular mass of 25KDa.</p> <p>Synonyms: Insulin-like growth factor-binding protein 1,IBP-1,IGF-binding protein 1,IGFBP-1,Placental protein 12,PP12,IGFBP1,IBP1,</p> <p>Full Gene Name: Insulin-like growth factor-binding protein 1</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	3484
UniProt:	<a href="#">P08833</a>
Pathways:	<a href="#">Myometrial Relaxation and Contraction</a> , <a href="#">ER-Nucleus Signaling</a> , <a href="#">Growth Factor Binding</a>

## Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
--------------------	--

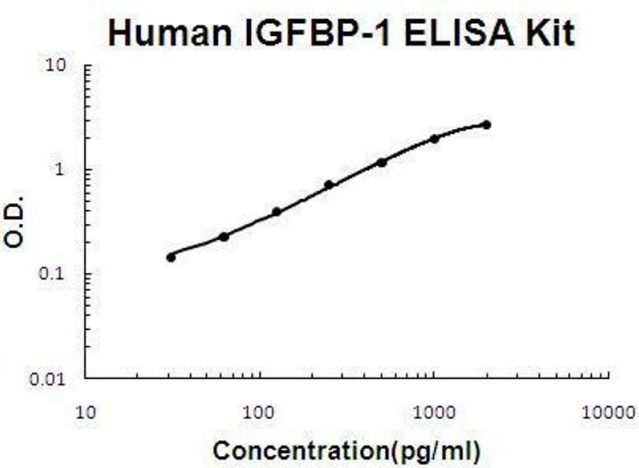
## Application Details

	assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 1 IGFBP N-terminal domain.
Plate:	Pre-coated
Protocol:	human IGFBP-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IGFBP-1 has been precoated onto 96-well plates. Standards(NSO, A26-N259) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IGFBP-1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human IGFBP-1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human IGFBP-1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma (heparin, EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human IGFBP-1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none"><li>• Sample 1: n=16, Mean(pg/ml): 145, Standard deviation: 6.09, CV(%): 4.2</li><li>• Sample 2: n=16, Mean(pg/ml): 736, Standard deviation: 37.54, CV(%): 5.1</li><li>• Sample 3: n=16, Mean(pg/ml): 1243, Standard deviation: 70.85, CV(%): 5.7,</li><li>• Sample 1: n=24, Mean(pg/ml): 173, Standard deviation: 10.21, CV(%): 5.9</li><li>• Sample 2: n=24, Mean(pg/ml): 667, Standard deviation: 42.02, CV(%): 6.3</li><li>• Sample 3: n=24, Mean(pg/ml): 1360, Standard deviation: 102, CV(%): 7.5</li></ul>
Restrictions:	For Research Use only

## Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

- Product cited in: Leira, Ameijeira, Domínguez, López-Arias, Ávila-Gómez, Pérez-Mato, Sobrino, Campos, DAiuto, Leira, Blanco: "Periodontal inflammation is related to increased serum calcitonin gene-related peptide levels in patients with chronic migraine." in: **Journal of periodontology**, Vol. 90, Issue 10, pp. 1088-1095, (2020) ([PubMed](#)).
- Tarperi, Sanchis-Gomar, Montagnana, Danese, Salvagno, Gelati, Skroce, Schena, Lippi: "Effects of endurance exercise on serum concentration of calcitonin gene-related peptide (CGRP): a potential link between exercise intensity and headache." in: **Clinical chemistry and laboratory medicine**, Vol. 58, Issue 10, pp. 1707-1712, (2020) ([PubMed](#)).
- Pérez-Pereda, Toriello-Suárez, Ocejo-Vinyals, Guiral-Foz, Castillo-Obeso, Montes-Gómez, Martínez-Nieto, Iglesias, González-Quintanilla, Oterino: "Serum CGRP, VIP, and PACAP usefulness in migraine: a case-control study in chronic migraine patients in real clinical practice." in: **Molecular biology reports**, Vol. 47, Issue 9, pp. 7125-7138, (2020) ([PubMed](#)).
- Pinto-Sanchez, Hall, Ghajar, Nardelli, Bolino, Lau, Martin, Cominetti, Welsh, Rieder, Traynor, Gregory, De Palma, Pigrau, Ford, Macri, Berger, Bergonzelli, Surette, Collins, Moayyedi, Bercik: "Probiotic Bifidobacterium longum NCC3001 Reduces Depression Scores and Alters Brain Activity: A Pilot Study in Patients With Irritable Bowel Syndrome." in: **Gastroenterology**, Vol. 153, Issue 2, pp. 448-459.e8, (2017) ([PubMed](#)).
- Lei, Zhu, Zhang, Duan, Lei, Huang: "Transient Receptor Potential Vanilloid Subtype 1 Inhibits Inflammation and Apoptosis via the Release of Calcitonin Gene-Related Peptide in the Heart after Myocardial Infarction." in: **Cardiology**, Vol. 134, Issue 4, pp. 436-43, (2016) ([PubMed](#)).



**ELISA**

**Image 1.** Human IGFBP-1 PicoKine ELISA Kit standard curve