Datasheet for ABIN1672887
IGFBP7 ELISA Kit

1 Image	**1** Publication

Overview

Quantity:	96 tests
Target:	IGFBP7
Binding Specificity:	AA 30-282
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	625-40000 pg/mL
Minimum Detection Limit:	625 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human IGFBP7
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: D30-L282
Specificity:	Expression system for standard: NSO Immunogen sequence: D30-L282
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<20pg/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:	IGFBP7
Alternative Name:	IGFBP7 (IGFBP7 Products)
Background:	Protein Function: Binds IGF-I and IGF-II with a relatively low affinity. Stimulates prostacyclin (PGI2) production. Stimulates cell adhesion. .
	Background: Insulin-like growth factor-binding protein 7 is a protein that in humans is encoded by the IGFBP7 gene. The gene was mapped to chromosome 4q12. The major function of the protein is the regulation of availability of insulin-like growth factors(IGFs) in tissue as well as in modulating IGF binding to its receptors. IGFBP7 binds to IGF with high affinity. It also stimulates cell adhesion. The protein is implicated in some cancers.
	Synonyms: Insulin-like growth factor-binding protein 7,IBP-7,IGF-binding protein 7,IGFBP-7,IGFBP-rP1,MAC25 protein,PGI2-stimulating factor,Prostacyclin-stimulating factor,Tumor-derived adhesion factor,TAF,IGFBP7,MAC25, PSF,
	Full Gene Name: Insulin-like growth factor-binding protein 7
	Cellular Localisation: Secreted.
Gene ID:	3490
UniProt:	Q16270
Pathways:	Growth Factor Binding

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Plate:	Pre-coated
Protocol:	human IGFBP7 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IGFBP7 has been precoated

Application Details

onto 96-well plates. Standards(NSO, D30-L282) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IGFBP7 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 IGFBP7 amount of sample captured in plate.

Assay Procedure:	Aliquot 0.1 mL per well of the 40000pg/mL, 20000pg/mL, 10000pg/mL, 5000pg/mL, 2,500pg/mL, 1,250pg/mL, 625pg/mL human IGFBP7 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 IGFBP7 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 2.3, Standard deviation: 0.101, CV(%): 4.4
- Sample 2: n=16, Mean(ng/ml): 16.2, Standard deviation: 0.729, CV(%): 4.5
- Sample 3: n=16, Mean(ng/ml): 28.1, Standard deviation: 1.43, CV(%): 5.1,
- Sample 1: n=24, Mean(ng/ml): 2.8, Standard deviation: 0.188, CV(%): 6.7
- Sample 2: n=24, Mean(ng/ml): 15.4, Standard deviation: 1.063, CV(%): 6.9
- Sample 3: n=24, Mean(ng/ml): 29.7, Standard deviation: 2.14, CV(%): 7.2

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

Publications

Product cited in:	Gungor, Unal, Guclu, Gezer, Eyileten, Guzel, Altunoren, Erken, Oguz, Kocyigit, Yilmaz: "IL-33 and ST2 levels in chronic kidney disease: Associations with inflammation, vascular abnormalities, cardiovascular events, and survival." in: **PLoS ONE**, Vol. 12, Issue 6, pp. e0178939, (2017) (PubMed).

Publications

Images

Human IGFBP7 ELISA Kit
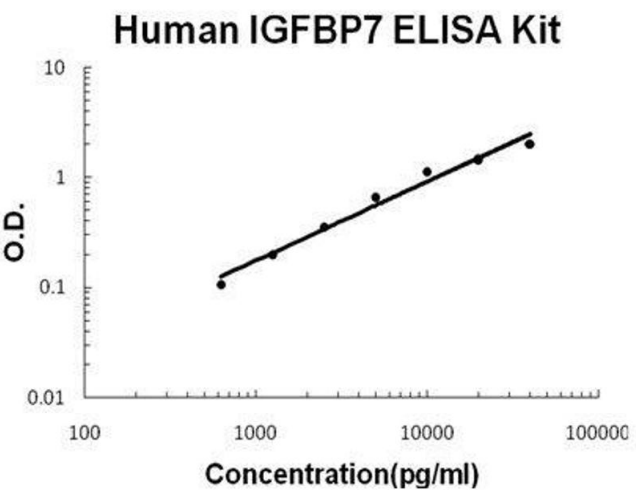
ELISA

Image 1. Human IGFBP7 PicoKine ELISA Kit standard curve