

Datasheet for ABIN411289

IGFBPI ELISA Kit[Go to Product page](#)**1** Image**3** Publications

Overview

Quantity:	96 tests
Target:	IGFBPI
Binding Specificity:	AA 26-272
Reactivity:	Mouse
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 Mouse IGFBP-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: A26-N272
Specificity:	Expression system for standard: NSO Immunogen sequence: A26-N272
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<3pg/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 (IGFBPI Products)
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 (By similarity). .</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 mouse IGFBP-1, consisting of 247 amino acids with the molecular mass of 27KDa.</p> <p>Synonyms: Insulin-like growth factor-binding protein 1,IBP-1,IGF-binding protein 1,IGFBP-1,Igfbp1,Igfbp-1,</p> <p>Full Gene Name: Insulin-like growth factor-binding protein 1</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	16006
UniProt:	P47876
Pathways:	Myometrial Relaxation and Contraction , ER-Nucleus Signaling , Growth Factor Binding

Application Details

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

	assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 1 IGFBP N-terminal domain.
Plate:	Pre-coated
Protocol:	mouse IGFBP-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for IGFBP-1 has been precoated onto 96-well plates. Standards(NSO, A26-N272) 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 mouse 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 mouse 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 mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse IGFBP-1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 108, Standard deviation: 5.72, CV(%): 5.3• Sample 2: n=16, Mean(pg/ml): 657, Standard deviation: 28.91, CV(%): 4.4• Sample 3: n=16, Mean(pg/ml): 1239, Standard deviation: 59.47, CV(%): 4.8,• Sample 1: n=24, Mean(pg/ml): 115, Standard deviation: 9.09, CV(%): 7.9• Sample 2: n=24, Mean(pg/ml): 638, Standard deviation: 41.47, CV(%): 6.5• Sample 3: n=24, Mean(pg/ml): 1341, Standard deviation: 97.89, CV(%): 7.3
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

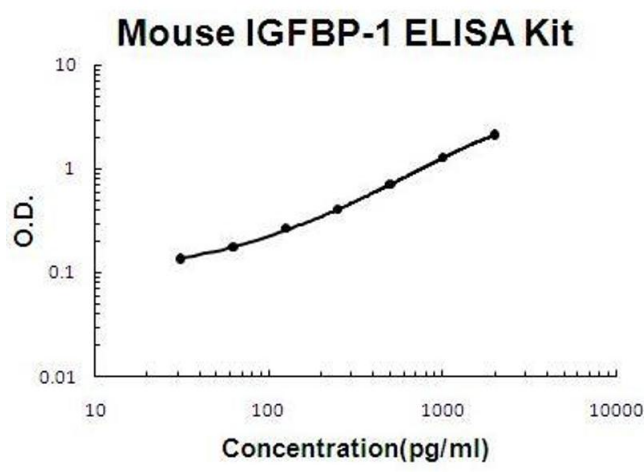
Publications

Product cited in: Matz-Soja, Aleithe, Marbach, Böttger, Arnold, Schmidt-Heck, Kratzsch, Gebhardt: "Hepatic Hedgehog signaling contributes to the regulation of IGF1 and IGFBP1 serum levels." in: **Cell communication and signaling : CCS**, Vol. 12, pp. 11, (2014) ([PubMed](#)).

Zhang, Zhao, Hu, Liu, Chen, Chen, Du: "Distinct post-transcriptional regulation of Igfbp1 gene by hypoxia in lowland mouse and Qinghai-Tibet plateau root vole *Microtus oeconomus*." in: **Molecular and cellular endocrinology**, Vol. 376, Issue 1-2, pp. 33-42, (2013) ([PubMed](#)).

Wang, Wang, Liang, Liu, Shi, Bai, Lin, Magaye, Zhao: "Expression and clinical significance of IGF-1, IGFBP-3, and IGFBP-7 in serum and lung cancer tissues from patients with non-small cell lung cancer." in: **OncoTargets and therapy**, Vol. 6, pp. 1437-44, (2013) ([PubMed](#)).

Images



ELISA

Image 1. Mouse IGFBP-1 PicoKine ELISA Kit standard curve