

Datasheet for ABIN1889356 IGFBP5 ELISA Kit

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Overview

Quantity:	96 tests
Target:	IGFBP5
Binding Specificity:	AA 20-271
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse IGFBP5
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: L20-E271
Specificity:	Expression system for standard: NSO Immunogen sequence: L20-E271
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/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:	IGFBP5
Alternative Name:	IGFBP5 (IGFBP5 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.</p> <p>Background: Insulin-like growth factor-binding protein 5 is a protein that in humans is encoded by the IGFBP5 gene. The IGFBP5 gene was mapped to chromosome 2q33-q34. The expression of IGFBP5 by stable transfection and adenovirus-mediated infection was inhibitory to growth in 2 human breast cancer cell lines. Stable expression of IGFBP5 in the breast cancer cell lines also inhibited the formation and growth of tumors following injection in athymic mice. IGFBP5 is believed a growth inhibitor and proapoptotic agent in breast cancer cells.</p> <p>Synonyms: Insulin-like growth factor-binding protein 5,IBP-5,IGF-binding protein 5,IGFBP-5,Igfbp5,Igfbp-5,</p> <p>Full Gene Name: Insulin-like growth factor-binding protein 5</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	16011
UniProt:	Q07079
Pathways:	WNT Signaling , Carbohydrate Homeostasis , Myometrial Relaxation and Contraction , Regulation of Carbohydrate Metabolic Process , Autophagy , Smooth Muscle Cell Migration , 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 IGFBP N-terminal domain.

Application Details

Tissue Specificity: Most abundant in kidney, uterus and gastrocnemius muscle.

Plate: Pre-coated

Protocol: mouse IGFBP5 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for IGFBP5 has been precoated onto 96-well plates. Standards(NSO, L20-E271) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IGFBP5 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 IGFBP5 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse IGFBP5 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 IGFBP5 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 1.1, Standard deviation: 0.045, CV(%): 4.1
- Sample 2: n=16, Mean(ng/ml): 3.4, Standard deviation: 0.167, CV(%): 4.9
- Sample 3: n=16, Mean(ng/ml): 6.2, Standard deviation: 0.341, CV(%): 5.5
- Sample 1: n=24, Mean(ng/ml): 1.5, Standard deviation: 0.084, CV(%): 5.6
- Sample 2: n=24, Mean(ng/ml): 3.8, Standard deviation: 0.247, CV(%): 6.5
- Sample 3: n=24, Mean(ng/ml): 6.7, Standard deviation: 0.476, CV(%): 7.1

Restrictions: For Research Use only

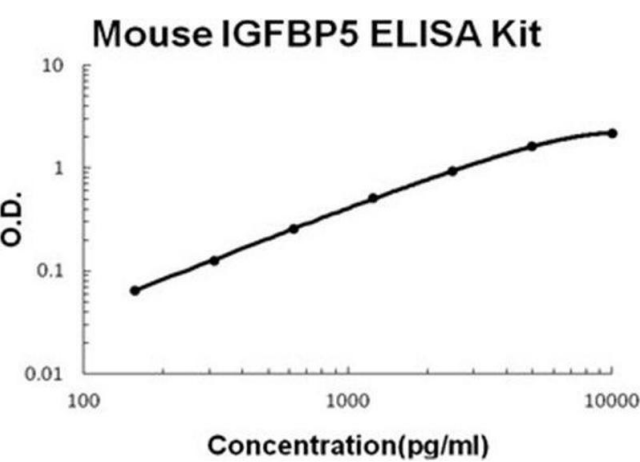
Handling

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



ELISA

Image 1. Mouse IGFBP5 PicoKine ELISA Kit standard curve