

Datasheet for ABIN1672735

IGF2 ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	IGF2
Binding Specificity:	AA 25-91
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse IGF-2
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: A25-E91
Specificity:	Expression system for standard: E.coli Immunogen sequence: A25-E91
Cross-Reactivity (Details):	There is no detectable cross-reactivity with IGF-1.

Product Details

Sensitivity:	<5pg/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

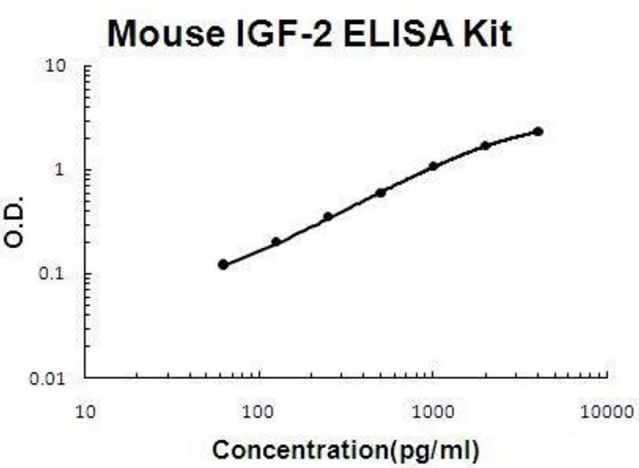
Target:	IGF2
Alternative Name:	IGF2 (IGF2 Products)
Background:	Protein Function: The insulin-like growth factors possess growth-promoting activity. In vitro, they are potent mitogens for cultured cells. IGF-II is influenced by placental lactogen and may play a role in fetal development. Background: Insulin-like growth factor II is also known as somatomedin A. IGF-2 is a member of the insulin family of polypeptide growth factors that is involved in development and growth. It is paternally expressed in the fetus and placenta. IGF-II is a mitogen for many cell types and an important modulator of muscle growth and differentiation. IGF-II gene is prevalently expressed during prenatal development and its gene activity is regulated by genomic imprinting, in that the allele inherited from the father is active and the allele inherited from the mother is inactive in most normal tissues. IGF-II appears to be induced by placental lactogen during prenatal development. It is a mediator of prolactin-induced alveologenesis, prolactin, IGF-2, and cyclin D1, all of which are overexpressed in breast cancers, are components of a developmental pathway in the mammary gland. Synonyms: Insulin-like growth factor II,IGF-II,Multiplication-stimulating polypeptide,Insulin-like growth factor II,Preptin,Igf2,Igf-2, Full Gene Name: Insulin-like growth factor II Cellular Localisation: Secreted.
Gene ID:	16002
UniProt:	P09535
Pathways:	Hormone Activity , Regulation of Hormone Metabolic Process , Regulation of Hormone Biosynthetic Process , Regulation of Carbohydrate Metabolic Process , Activated T Cell Proliferation

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.
Plate:	Pre-coated
Protocol:	mouse IGF-2 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for IGF-2 has been precoated onto 96-well plates. Standards(E.coli, A25-E91) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IGF-2 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 IGF-2 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL mouse IGF-2 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 IGF-2 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 445, Standard deviation: 19.58, CV(%): 4.4 • Sample 2: n=16, Mean(pg/ml): 1436, Standard deviation: 68.93, CV(%): 4.8 • Sample 3: n=16, Mean(pg/ml): 2643, Standard deviation: 140.1, CV(%): 5.3, • Sample 1: n=24, Mean(pg/ml): 513, Standard deviation: 31.3, CV(%): 6.1 • Sample 2: n=24, Mean(pg/ml): 1567, Standard deviation: 114.4, CV(%): 7.3 • Sample 3: n=24, Mean(pg/ml): 2753, Standard deviation: 217.5, CV(%): 7.9
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 IGF-2 PicoKine ELISA Kit standard curve