

Datasheet for ABIN2859333

IGF2R ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	IGF2R
Binding Specificity:	AA 1510-2108
Reactivity:	Human
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 Human IGF2R
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: S1510-F2108
Specificity:	Expression system for standard: NSO Immunogen sequence: S1510-F2108
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: IGF2R

Alternative Name: IGF2R ([IGF2R Products](#))

Background: Protein Function: Transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to lysosomes. Lysosomal enzymes bearing phosphomannosyl residues bind specifically to mannose-6- phosphate receptors in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelysosomal compartment where the low pH mediates the dissociation of the complex. This receptor also binds IGF2. Acts as a positive regulator of T-cell coactivation, by binding DPP4. .

Background: Insulin-like growth factor 2 receptor, also called IGF2R or I-MPR is a protein that in humans is encoded by the IGF2R gene. This gene is mapped to 6q25.3. This gene encodes a receptor for both insulin-like growth factor 2 and mannose 6-phosphate, although the binding sites for either are located on different segments of the receptor. This receptor functions in the intracellular trafficking of lysosomal enzymes, the activation of transforming growth factor beta, and the degradation of insulin-like growth factor 2. While the related mouse gene shows exclusive expression from the maternal allele, imprinting of the human gene appears to be polymorphic, with only a minority of individuals showing expression from the maternal allele.

Synonyms: Cation-independent mannose-6-phosphate receptor,CI Man-6-P receptor,CI-MPR,M6PR,300 kDa mannose 6-phosphate receptor,MPR 300,Insulin-like growth factor 2 receptor,Insulin-like growth factor II receptor,IGF-II receptor,M6P/IGF2 receptor,M6P/IGF2R,CD222,IGF2R,MPRI,

Full Gene Name: Cation-independent mannose-6-phosphate receptor

Cellular Localisation: Lysosome membrane, Single-pass type I membrane protein . Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface.

Gene ID: 3482

UniProt: [P11717](#)

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: Belongs to the MRL1/IGF2R family.

Plate: Pre-coated

Protocol: human IGF2R ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IGF2R has been precoated onto 96-well plates. Standards(NSO, S1510-F2108) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IGF2R 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 IGF2R 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 human IGF2R 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 or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human IGF2R standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 1.8, Standard deviation: 0.063, CV(%): 3.5
- Sample 2: n=16, Mean(ng/ml): 4.2, Standard deviation: 0.172, CV(%): 4.1
- Sample 3: n=16, Mean(ng/ml): 6.7, Standard deviation: 0.389, CV(%): 5.8,
- Sample 1: n=24, Mean(ng/ml): 1.5, Standard deviation: 0.065, CV(%): 4.3
- Sample 2: n=24, Mean(ng/ml): 3.9, Standard deviation: 0.222, CV(%): 5.7
- Sample 3: n=24, Mean(ng/ml): 6.4, Standard deviation: 0.397, CV(%): 6.2

Restrictions: For Research Use only

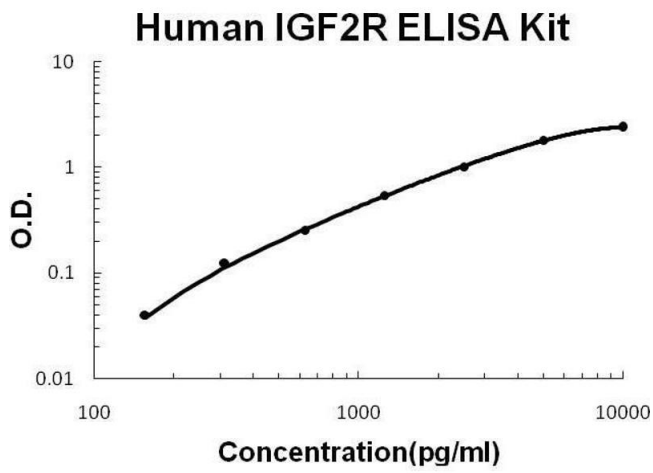
Handling

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



ELISA

Image 1.