Datasheet for ABIN2859321

TGFBI ELISA Kit

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Overview

Quantity:	96 tests
Target:	TGFBI
Binding Specificity:	AA 24-683
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 beta IG-H3/TGFBI
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: G24-H683
Specificity:	NSO, G24-H683
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<5pg/mL

Product Details

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:	TGFBI
Alternative Name:	TGFBI (TGFBI Products)
Background:	Protein Function: Plays a role in cell adhesion (PubMed:8024701). May play a role in cell-collagen interactions (By similarity). . Background: Transforming growth factor, beta-induced, 68 kDa, also known as TGFBI (initially called BIGH3, BIG-H3), is a protein which in humans is encoded by the TGFBI gene. It is mapped to 5q31.1. This gene encodes an RGD-containing protein that binds to type I, II and IV collagens. The RGD motif is found in many extracellular matrix proteins modulating cell adhesion and serves as a ligand recognition sequence for several integrins. This protein plays a role in cell-collagen interactions and may be involved in endochondrial bone formation in cartilage. The protein is induced by transforming growth factor-beta and acts to inhibit cell adhesion. Synonyms: Transforming growth factor-beta-induced protein ig-h3,Beta ig-h3,Tgfbi, Full Gene Name: Transforming growth factor-beta-induced protein ig-h3 Cellular Localisation: Secreted . Secreted, extracellular space, extracellular matrix . May be associated both with microfibrils and with the cell surface..
Gene ID:	21810
UniProt:	P82198

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:	Tissue Specificity: Expressed in heart, kidney, liver, skeletal muscle, testis, thyroid and uterus (PubMed:8024701). .
Plate:	Pre-coated
Protocol:	mouse beta IG-H3 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for beta IG-H3 has been precoated

Application Details

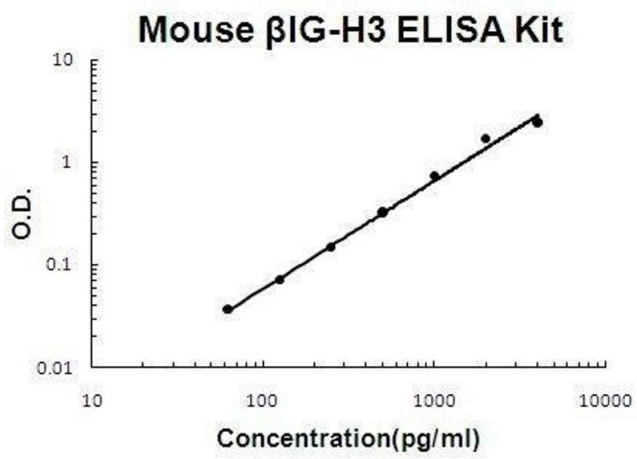
	onto 96-well plates. Standards(NSO, G24-H683) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for beta IG-H3 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates 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 beta IG-H3 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 βIG-H3 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 βIG-H3 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 447, Standard deviation: 28.61, CV(%): 6.4 • Sample 2: n=16, Mean(pg/ml): 1253, Standard deviation: 53.88, CV(%): 4.3 • Sample 3: n=16, Mean(pg/ml): 2346, Standard deviation: 115, CV(%): 4.9, • Sample 1: n=24, Mean(pg/ml): 450, Standard deviation: 39.15, CV(%): 8.7 • Sample 2: n=24, Mean(pg/ml): 1238, Standard deviation: 64.38, CV(%): 5.2 • Sample 3: n=24, Mean(pg/ml): 2625, Standard deviation: 144.4, CV(%): 5.5
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:	Ge, Yu, Liu, Cong, Liu, Wang, Zhou, Lin: "Characterization of bone marrow-derived mesenchymal stem cells from dimethyloxallyl glycine-preconditioned mice: Evaluation of the feasibility of dimethyloxallyl glycine as a mobilization agent." in: **Molecular medicine reports**, Vol. 13, Issue 4 , pp. 3498-506, (2016) (PubMed).



ELISA

Image 1. Mouse βIG-H3/TGFBI PicoKine ELISA Kit standard curve