Datasheet for ABIN1889336

TGFB3 ELISA Kit

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Overview

Quantity:	96 tests
Target:	TGFB3
Binding Specificity:	AA 301-412
Reactivity:	Rat
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 activated Rat TGF-beta 3
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: sf21 Immunogen sequence: A301-S412
Specificity:	Expression system for standard: sf21 Immunogen sequence: A301-S412
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:	TGFB3
Alternative Name:	TGFB3 (TGFB3 Products)
Background:	Protein Function: Involved in embryogenesis and cell differentiation. Background: Transforming growth factor beta 3(TGF-beta 3) is a type of protein, known as a cytokine, which is involved in cell differentiation, embryogenesis and development. It belongs to a large family of cytokines called the Transforming growth factor beta superfamily. TGF-beta 3 is believed to regulate molecules involved in cellular adhesion and extracellular matrix(ECM) formation during the process of palate development. Without TGF-beta 3, mammals develop a deformity known as acleft palate. This is caused by failure of epithelial cells in both sides of the developing palate to fuse. TGF-beta 3 also plays an essential role in controlling the development of lungs in mammals, by also regulating cell adhesion and ECM formation in this tissue, and controls wound healing by regulating the movements of epidermal and dermal cells in injured skin. TGF-beta 3 activated Lef1 in the absence of beta-catenin(CTNNB1) via nuclear phospho-Smad2 and Smad4. Synonyms: Transforming growth factor beta-3,TGF-beta-3,Latency-associated peptide,LAP,Tgfb3,Tgf-b3, Full Gene Name: Transforming growth factor beta-3 Cellular Localisation: Secreted.
Gene ID:	25717
UniProt:	Q07258
Pathways:	Cell-Cell Junction Organization, Production of Molecular Mediator of Immune Response, Protein targeting to Nucleus

Application Details

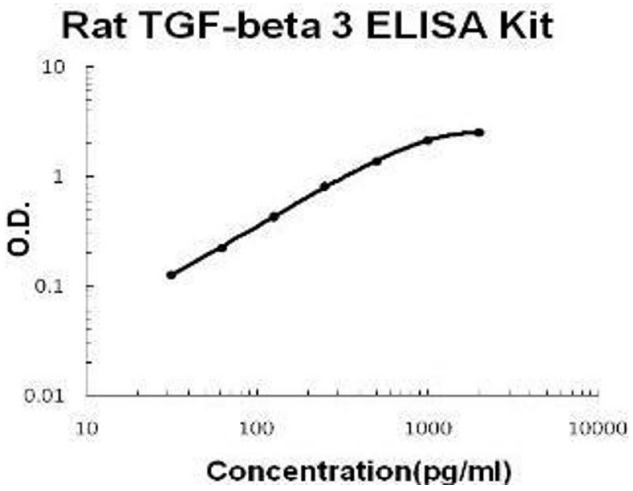
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Application Details

Plate:	Pre-coated
Protocol:	rat TGF-beta 3 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for TGF-beta 3 has been precoated onto 96-well plates. Standards(sf21, A301-S412) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TGF-beta 3 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 rat TGF-beta 3 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 rat TGF-beta 3 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 activated rat cell culture supernates, serum, plasma(EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each rat TGF-beta 3 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 240, Standard deviation: 9.84, CV(%): 4.1 • Sample 2: n=16, Mean(pg/ml): 528, Standard deviation: 25.9, CV(%): 4.9 • Sample 3: n=16, Mean(pg/ml): 1024, Standard deviation: 56.32, CV(%): 5.5, • Sample 1: n=24, Mean(pg/ml): 256, Standard deviation: 13.3, CV(%): 5.2 • Sample 2: n=24, Mean(pg/ml): 545, Standard deviation: 32.7, CV(%): 6 • Sample 3: n=24, Mean(pg/ml): 1118, Standard deviation: 75, CV(%): 6.7
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. Rat TGF-beta 3 PicoKine ELISA Kit standard curve