Datasheet for ABIN1889331

TGFB2 ELISA Kit

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	96 tests
Target:	TGFB2
Binding Specificity:	AA 303-414
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 2
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: A303-S414
Specificity:	Expression system for standard: NSO Immunogen sequence: A303-S414
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:	TGFB2
Alternative Name:	TGFB2 (TGFB2 Products)
Background:	Protein Function: TGF-beta 2 has suppressive effects on interleukin-2 dependent T-cell growth. Background: Transforming growth factor-beta 2(TGF-beta 2) is a secreted protein known as a cytokine that performs many cellular functions and has a vital role during embryonic development. This gene is mapped to 1q41. It is an extracellular glycosylated protein. It is known to suppress the effects of interleukin dependent T-cell tumors. TGF-beta 2 is present at elevated levels in the aqueous humor of patients with primary open angle glaucoma(POAG). Studies have shown that TGF-beta 2 influences cultured trabecular meshwork cells, and it reduced outflow facility when perfused into cultured human anterior segments. In POAG, elevated expression of Gremlin by TM cells inhibited BMP4 antagonism of TGF-beta 2 and led to increased extracellular matrix deposition and elevated IOP. Synonyms: Transforming growth factor beta-2,TGF-beta-2,Latency-associated peptide,LAP,Tgfb2, Full Gene Name: Transforming growth factor beta-2 Cellular Localisation: Secreted.
Gene ID:	81809
UniProt:	Q07257
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.
Comment:	Tissue Specificity: Isoform TGF-beta2B expressed in the aorta, primary bronchus, uterus, heart,

Application Details

	skeletal muscle, sciatic nerve and spinal cord but not in the intestine. .
Plate:	Pre-coated
Protocol:	rat TGF-beta 2 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for TGF-beta 2 has been precoated onto 96-well plates. Standards(NSO, A303-S414) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TGF-beta 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 rat TGF-beta 2 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 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 activated rat cell culture supernates, serum or plasma(heparin, EDTA, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each rat TGF-beta 2 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 304, Standard deviation: 16.42, CV(%): 5.4 • Sample 2: n=16, Mean(pg/ml): 614, Standard deviation: 31.93, CV(%): 5.2 • Sample 3: n=16, Mean(pg/ml): 1172, Standard deviation: 79.7, CV(%): 6.8, • Sample 1: n=24, Mean(pg/ml): 377, Standard deviation: 23.75, CV(%): 6.3 • Sample 2: n=24, Mean(pg/ml): 536, Standard deviation: 39.13, CV(%): 7.3 • Sample 3: n=24, Mean(pg/ml): 1223, Standard deviation: 88.1, CV(%): 7.2
Restrictions:	For Research Use only

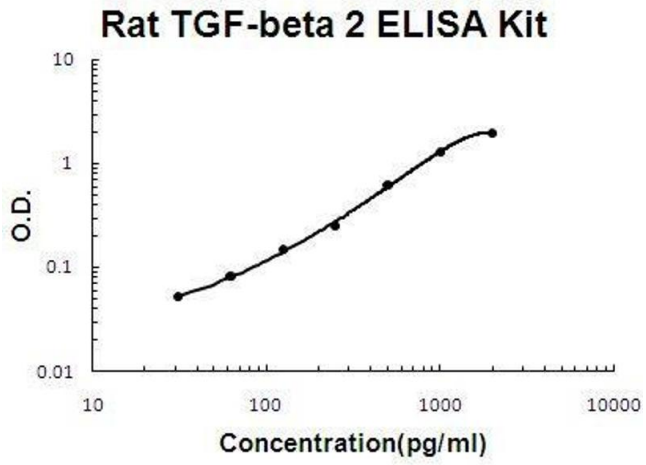
Handling

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

Publications

Product cited in:	Li, Liu, Shen, Wang, Chen, Xu, Wen: "MicroRNA-26a modulates transforming growth factor beta-1-induced proliferation in human fetal lung fibroblasts." in: **Biochemical and biophysical research communications**, Vol. 454, Issue 4, pp. 512-517, (2014) (PubMed).

Images



ELISA

Image 1. Rat TGF-beta 2 PicoKine ELISA Kit standard curve