Datasheet for ABIN411256

INHBA ELISA Kit

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	96 tests
Target:	INHBA
Binding Specificity:	AA 311-426
Reactivity:	Rat
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Rat Activin A
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: CHO Immunogen sequence: G311-S426
Specificity:	Expression system for standard: CHO Immunogen sequence: G311-S426
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Predicted Reactivity:	Bovine,Monkey,Rabbit
Sensitivity:	<12pg/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:	INHBA
Alternative Name:	INHBA (INHBA Products)
Background:	Protein Function: Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins. Background: Activin A is a homodimer of 14 kDa beta-A. Activin A, a cytokine member of the transforming growth factor-beta superfamily, is expressed locally by the mesenchymal component of the hemopoietic microenvironment. Its expression is regulated on the mRNA level by different cytokines, and the biological activity of the protein is tightly controlled by several inhibitory molecules. Inhibins and activins are members of the transforming growth factor beta superfamily and are known to modulate the growth and differentiation of several cell types. Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins. The standard product used in this kit is recombinant Activin A, which is composed of two single chains of 116 amino acids with the molecular mass of 26KDa. Synonyms: Inhibin beta A chain,Activin beta-A chain,Inhba, Full Gene Name: Inhibin beta A chain Cellular Localisation: Secreted.

Target Details

Gene ID:	29200
UniProt:	P18331
Pathways:	Hormone Transport, Peptide Hormone Metabolism, Hormone Activity, Negative Regulation of Hormone Secretion, Autophagy

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:	rat Activin A ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Activin A has been precoated onto 96-well plates. Standards(CHO, G311-S426) and test samples are added to the wells, a biotinylated detection monoclonal antibody from mouse specific for Activin A 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 Activin A amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL rat Activin A 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 rat cell culture supernates, serum, plasma(heparin, EDTA) or saliva to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each rat Activin A standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 97, Standard deviation: 4.9, CV(%): 5 • Sample 2: n=16, Mean(pg/ml): 294, Standard deviation: 14.7, CV(%): 5 • Sample 3: n=16, Mean(pg/ml): 459, Standard deviation: 23.9, CV(%): 5.2, • Sample 1: n=24, Mean(pg/ml): 103, Standard deviation: 8.0, CV(%): 7.8 • Sample 2: n=24, Mean(pg/ml): 315, Standard deviation: 19.8, CV(%): 6.3 • Sample 3: n=24, Mean(pg/ml): 512, Standard deviation: 24.6, CV(%): 4.8
Restrictions:	For Research Use only

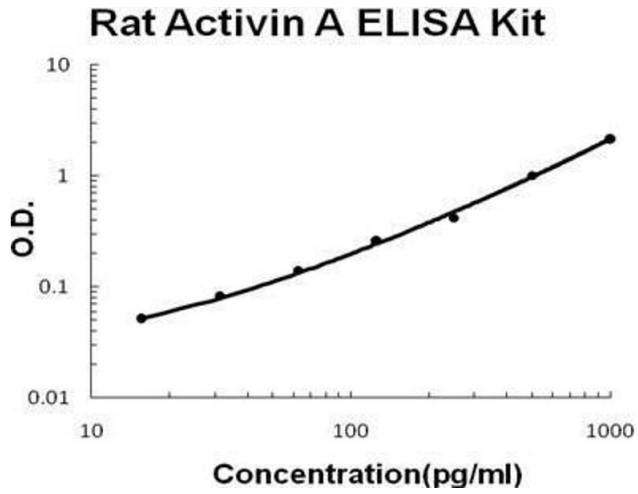
Handling

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:	Zhou, Qu, Jin, Yang: "The extracts of Pacific oyster (Crassostrea gigas) alleviate ovarian functional disorders of female rats with exposure to bisphenol a through decreasing FSHR expression in ovarian tissues." in: **African journal of traditional, complementary, and alternative medicines : AJTCAM**, Vol. 11, Issue 5, pp. 1-7, (2015) (PubMed).

Images



ELISA

Image 1. Rat Activin A PicoKine ELISA Kit standard curve