Datasheet for ABIN1889359

Periostin ELISA Kit

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Overview

Quantity:	96 tests
Target:	Periostin (POSTN)
Binding Specificity:	AA 24-836
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	93.7-6000 pg/mL
Minimum Detection Limit:	93.7 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Periostin/OSF2
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: N24-Q836
Specificity:	Expression system for standard: NSO Immunogen sequence: N24-Q836
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:	Periostin (POSTN)
Alternative Name:	POSTN (POSTN Products)
Background:	Protein Function: Induces cell attachment and spreading and plays a role in cell adhesion. May play a role in extracellular matrix mineralization. Enhances incorporation of BMP1 in the fibronectin matrix of connective tissues, and subsequent proteolytic activation of lysyl oxidase LOX. . Background: Periostin, also known as OSF2, is a protein that in humans is encoded by the POSTN gene. The International Radiation Hybrid Mapping Consortium mapped the POSTN gene to chromosome 13. Periostin functions as a ligand for alpha-V/beta-3 and alpha-V/ beta-5 integrins to support adhesion and migration of epithelial cells. It is found that periostin was overexpressed by the majority of human primary breast cancers examined. After myocardial infarction, periostin-induced cardiomyocyte cell cycle reentry and mitosis were associated with improved ventricular remodeling and myocardial function, reduced fibrosis and infarct size, and increase angiogenesis. Synonyms: Periostin,PN,Osteoblast-specific factor 2,OSF-2,Postn,Osf2, Full Gene Name: Periostin Cellular Localisation: Golgi apparatus. Secreted, extracellular space, extracellular matrix. Colocalizes with BMP1 in the Golgi.
Gene ID:	50706
UniProt:	Q62009

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: Contains 1 EMI domain. Tissue Specificity: Preferentially expressed in periosteum and periodontal ligament. Also

Application Details

	expressed in the developing and adult heart. .
Plate:	Pre-coated
Protocol:	mouse Periostin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Periostin has been precoated onto 96-well plates. Standards(NSO, N24-Q836) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Periostin 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 Periostin amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 6000pg/mL, 3000pg/mL, 1500pg/mL, 750pg/mL, 375pg/mL, 187.5pg/mL, 93.7pg/m mouse Periostin 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 Periostin standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 783, Standard deviation: 49.33, CV(%): 6.3 • Sample 2: n=16, Mean(pg/ml): 1721, Standard deviation: 98.1, CV(%): 5.7 • Sample 3: n=16, Mean(pg/ml): 2910, Standard deviation: 142.6, CV(%): 4.9, • Sample 1: n=24, Mean(pg/ml): 867, Standard deviation: 63.3, CV(%): 7.3 • Sample 2: n=24, Mean(pg/ml): 1834, Standard deviation: 143.1, CV(%): 7.8 • Sample 3: n=24, Mean(pg/ml): 3127, Standard deviation: 172, 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

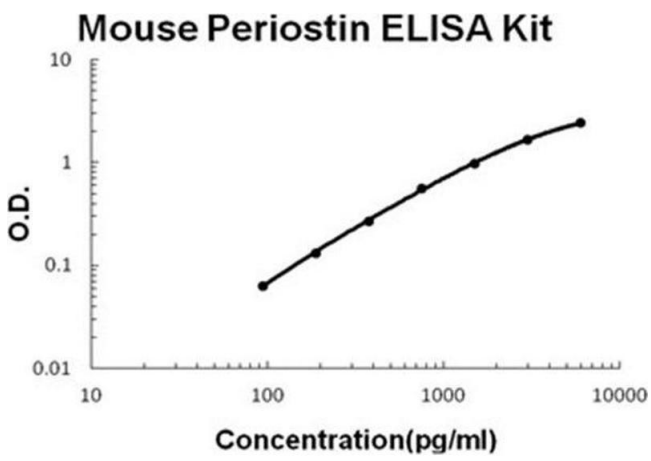
Publications

Product cited in:	Krencik, Hokanson, Narayan, Dvornik, Rooney, Rauen, Weiss, Rowitch, Ullian: "Dysregulation of

Publications

astrocyte extracellular signaling in Costello syndrome." in: **Science translational medicine**, Vol. 7, Issue 286, pp. 286ra66, (2015) (PubMed).

Images



ELISA

Image 1. Mouse Periostin/OSF2 PicoKine ELISA Kit standard curve