Datasheet for ABIN1889353

Sclerostin ELISA Kit

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Overview

Quantity:	96 tests
Target:	Sclerostin (SOST)
Binding Specificity:	AA 24-211
Reactivity:	Mouse
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 Mouse Sclerostin/SOST
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: Q24-Y211
Specificity:	Expression system for standard: NSO Immunogen sequence: Q24-Y211
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:	Sclerostin (SOST)
Alternative Name:	SOST (SOST Products)
Background:	Protein Function: Negative regulator of bone growth that acts through inhibition of Wnt signaling and bone formation. . Background: Sclerostin is a protein that in humans is encoded by the SOST gene. Sclerostin is a secreted glycoprotein with a C-terminal cysteine knot-like(CTCK) domain and sequence similarity to the DAN(differential screening-selected gene aberrative in neuroblastoma) family of bone morphogenetic protein(BMP) antagonists. Sclerostin is produced by the osteocyte and has anti-anabolic effects on bone formation. The SOST gene maps to chromosome 17q12-q21 Synonyms: Sclerostin,Sost, Full Gene Name: Sclerostin Cellular Localisation: Secreted, extracellular space, extracellular matrix.
Gene ID:	74499
UniProt:	Q99P68

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: Belongs to the sclerostin family.
Plate:	Pre-coated
Protocol:	mouse Sclerostin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Sclerostin has been precoated onto 96-well plates. Standards(NSO, Q24-Y211) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Sclerostin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase

Application Details

	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 Sclerostin 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 mouse Sclerostin 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 Sclerostin standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 76, Standard deviation: 5.55, CV(%): 7.3 • Sample 2: n=16, Mean(pg/ml): 217, Standard deviation: 12.6, CV(%): 5.8 • Sample 3: n=16, Mean(pg/ml): 463, Standard deviation: 25.93, CV(%): 5.6, • Sample 1: n=24, Mean(pg/ml): 88, Standard deviation: 7.13, CV(%): 8.1 • Sample 2: n=24, Mean(pg/ml): 225, Standard deviation: 14.4, CV(%): 6.4 • Sample 3: n=24, Mean(pg/ml): 478, Standard deviation: 28.68, CV(%): 6
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

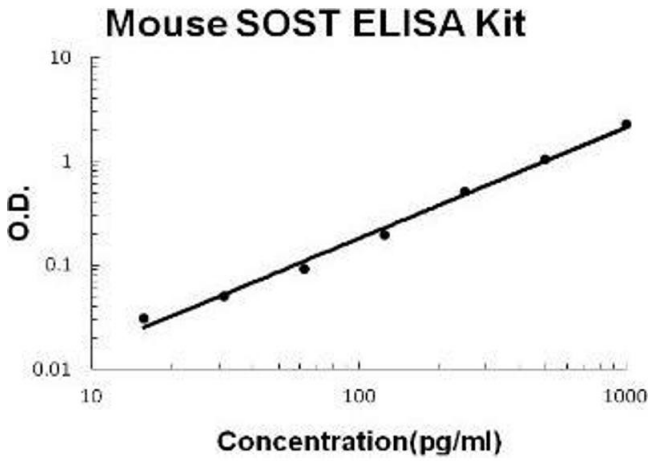
Publications

Product cited in:	Li, Hu, Wang, Zhang, Zhou, Yang, Li, Xiong, Liu, Li, Wu, Zheng: "Autophagy-dependent generation of Axin2+ cancer stem-like cells promotes hepatocarcinogenesis in liver cirrhosis." in: **Oncogene**, Vol. 36, Issue 48, pp. 6725-6737, (2017) (PubMed). Yang, Wu, Feng, Huang, Liu, Liu, Chen: "Vitamin C plus hydrogel facilitates bone marrow stromal cell-mediated endometrium regeneration in rats." in: **Stem cell research & therapy**, Vol. 8, Issue 1, pp. 267, (2017) (PubMed).

Publications

Secchiero, Corallini, Zavan, Tripodo, Vindigni, Zauli: "Mesenchymal stem cells display hepato-protective activity in lymphoma bearing xenografts." in: **Investigational new drugs**, Vol. 30, Issue 2, pp. 803-7, (2012) (PubMed).

Images



ELISA

Image 1. Mouse Sclerostin/SOST PicoKine ELISA Kit standard curve