

Datasheet for ABIN1672853

MIA ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	MIA
Binding Specificity:	AA 25-131
Reactivity:	Human
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 Human MIA
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: G25-131Q
Specificity:	Expression system for standard: E.coli Immunogen sequence: G25-131Q
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:	MIA
Alternative Name:	MIA (MIA Products)
Background:	<p>Protein Function: Elicits growth inhibition on melanoma cells in vitro as well as some other neuroectodermal tumors, including gliomas.</p> <p>Background: Melanoma Inhibiting Activity(MIA), also known as cartilage-derived retinoic acid-sensitive protein(CD-RAP), is an approximately 11-15 kDa protein that is expressed as a noncovalent homodimer. MIA is structurally related to OTOR/Otoraplin and MIA-2 in a small family of secreted proteins with one SH3 domain(1-3). And the MIA gene was mapped to 19q13.32-q13.33 by fluorescence in situ hybridization. Beside, It is a marker for malignant melanoma. MIA functions as a chemoattractant for mesenchymal stem cells and enhances their BMP-2 and TGF-beta3 induced differentiation into chondrocytes . MIA-deficient mice exhibit delayed chondrocyte differentiation but enhanced chondrocyte proliferation and cartilage repair .</p> <p>Synonyms: Melanoma-derived growth regulatory protein,Melanoma inhibitory activity protein,MIA,</p> <p>Full Gene Name: Melanoma-derived growth regulatory protein</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	8190
UniProt:	Q16674

Application Details

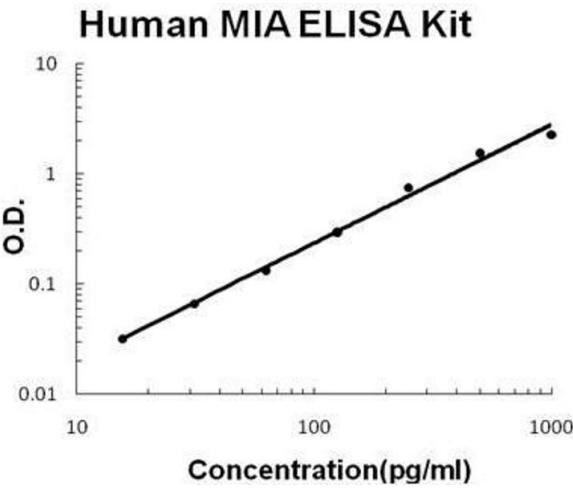
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	<p>Sequence similarities: Belongs to the MIA/OTOR family.</p> <p>Tissue Specificity: All malignant melanoma cell lines tested and infrequently in glioma cell lines.</p>

Application Details

Plate:	Pre-coated
Protocol:	human MIA ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for MIA has been precoated onto 96-well plates. Standards(E.coli, G25-131Q) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MIA is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB are used to visualize HRP enzymatic reaction. TMB is 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 human MIA 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 human MIA 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 human 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 human MIA standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 139, Standard deviation: 5.42, CV(%): 3.9• Sample 2: n=16, Mean(pg/ml): 325, Standard deviation: 16.25, CV(%): 5• Sample 3: n=16, Mean(pg/ml): 642, Standard deviation: 36.6, CV(%): 5.7,• Sample 1: n=24, Mean(pg/ml): 157, Standard deviation: 7.54, CV(%): 4.8• Sample 2: n=24, Mean(pg/ml): 368, Standard deviation: 22.45, CV(%): 6.1• Sample 3: n=24, Mean(pg/ml): 667, Standard deviation: 46, CV(%): 6.9
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. Human MIA PicoKine ELISA Kit standard curve