

Datasheet for ABIN2859341

Syndecan 1 ELISA Kit**1** Image[Go to Product page](#)

Overview

Quantity:	96 tests
Target:	Syndecan 1 (SDC1)
Binding Specificity:	AA 23-254
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human SDC1/Syndecan-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q23-G254
Specificity:	Expression system for standard: NSO Immunogen sequence: Q23-G254
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:	Syndecan 1 (SDC1)
Alternative Name:	SDC1 (SDC1 Products)
Background:	<p>Protein Function: Cell surface proteoglycan that bears both heparan sulfate and chondroitin sulfate and that links the cytoskeleton to the interstitial matrix.</p> <p>Background: Syndecan 1, also known as SYND1 or CD138, is a protein which in humans is encoded by the SDC1 gene. The protein encoded by this gene is a transmembrane(type I) heparan sulfate proteoglycan and is a member of the syndecan proteoglycan family. This gene is mapped to 2p24.1. The syndecans mediate cell binding, cell signaling, cytoskeletal organization and syndecan receptors are required for internalization of the HIV-1 tat protein. The syndecan 1 protein functions as an integral membrane protein and participates in cell proliferation, cell migration and cell-matrix interactions via its receptor for extracellular matrix proteins. What's more, Syndecan-1 is also a sponge for growth factors, with binding largely via heparan sulfate chains.</p> <p>Synonyms: Syndecan-1,SYND1,CD138,SDC1,SDC,</p> <p>Full Gene Name: Syndecan-1</p> <p>Cellular Localisation: Membrane, Single-pass type I membrane protein. Secreted. Shedding of the ectodomain produces a soluble form.</p>
Gene ID:	6382
UniProt:	P18827
Pathways:	Glycosaminoglycan Metabolic Process , Regulation of Muscle Cell Differentiation , Skeletal Muscle Fiber Development , Lipid Metabolism

Application Details

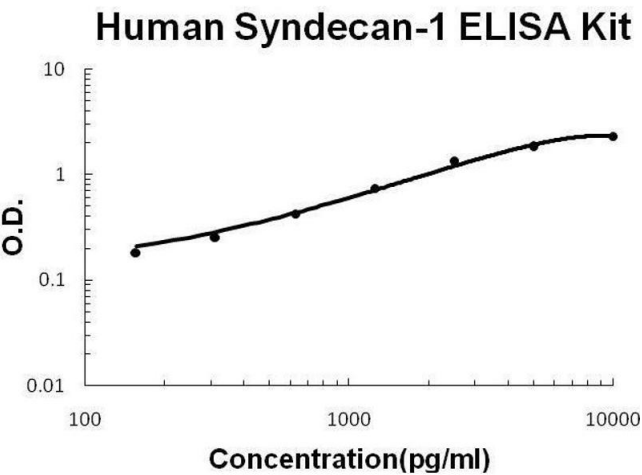
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
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Application Details

Comment:	Sequence similarities: Belongs to the syndecan proteoglycan family.
Plate:	Pre-coated
Protocol:	human Syndecan-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Syndecan-1 has been precoated onto 96-well plates. Standards(NSO, Q23-G254) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Syndecan-1 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 human Syndecan-1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human Syndecan-1 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 or serum to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Syndecan-1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.23, Standard deviation: 0.048, CV(%): 3.9• Sample 2: n=16, Mean(ng/ml): 3.25, Standard deviation: 0.15, CV(%): 4.6• Sample 3: n=16, Mean(ng/ml): 5.87, Standard deviation: 0.299, CV(%): 5.1,• Sample 1: n=24, Mean(ng/ml): 1.32, Standard deviation: 0.07, CV(%): 5.3• Sample 2: n=24, Mean(ng/ml): 4.05, Standard deviation: 0.235, CV(%): 5.8• Sample 3: n=24, Mean(ng/ml): 6.42, Standard deviation: 0.417, CV(%): 6.5
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



ELISA

Image 1. Human SDC1/Syndecan-1 PicoKine ELISA Kit standard curve