

Datasheet for ABIN2859227

SDC4 ELISA Kit[Go to Product page](#)**1** Image

Overview

Quantity:	96 tests
Target:	SDC4
Binding Specificity:	AA 19-145
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Syndecan-4
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: E19-E145
Specificity:	Expression system for standard: NSO Immunogen sequence: E19-E145
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:	SDC4
Alternative Name:	SDC4 (SDC4 Products)
Background:	<p>Protein Function: Cell surface proteoglycan that bears heparan sulfate.</p> <p>Background: Syndecan-4 (SDC4) is a protein that in humans is encoded by the SDC4 gene. The protein is found as a homodimer and is a member of the syndecan proteoglycan family. It is mapped to 20q13.12. Syndecan-4 is one of the four vertebrate syndecans and has a molecular weight of ~20 kDa. It is a transmembrane (type I) heparan sulfate proteoglycan that functions as a receptor in intracellular signaling. Syndecan-4 also regulates the actin cytoskeleton, cell adhesion, and cell migration. In addition, Syndecan-4 can activate protein kinase C (PKC). The variable domain of syndecan-4 could be a site of self-association. What's more, Syndecan-4 also binds to phosphatidylinositol (4,5)-bisphosphate (PIP2) through the variable domain and increases PKC activity ten-fold.</p> <p>Synonyms: Syndecan-4,SYND4,Amphiglycan,Ryudocan core protein,SDC4,</p> <p>Full Gene Name: Syndecan-4</p> <p>Cellular Localisation: Isoform 1: Membrane, Single-pass type I membrane protein. Secreted. Shedding of the ectodomain produces a soluble form..</p>
Gene ID:	6385
UniProt:	P31431
Pathways:	Glycosaminoglycan Metabolic Process

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:	Tissue Specificity: Expressed in epithelial and fibroblastic cells. .
Plate:	Pre-coated

Application Details

Protocol: human Syndecan-4 ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Syndecan-4 has been precoated onto 96-well plates. Standards(NSO, E19-E145) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Syndecan-4 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 Syndecan-4 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human Syndecan-4 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-4 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 630, Standard deviation: 26.5, CV(%): 4.2
- Sample 2: n=16, Mean(pg/ml): 1447, Standard deviation: 83.9, CV(%): 5.8
- Sample 3: n=16, Mean(pg/ml): 2135, Standard deviation: 100.3, CV(%): 4.7,
- Sample 1: n=24, Mean(pg/ml): 718, Standard deviation: 35.2, CV(%): 4.9
- Sample 2: n=24, Mean(pg/ml): 1604, Standard deviation: 104.3, CV(%): 6.5
- Sample 3: n=24, Mean(pg/ml): 2369, Standard deviation: 120.8, CV(%): 5.1

Restrictions: For Research Use only

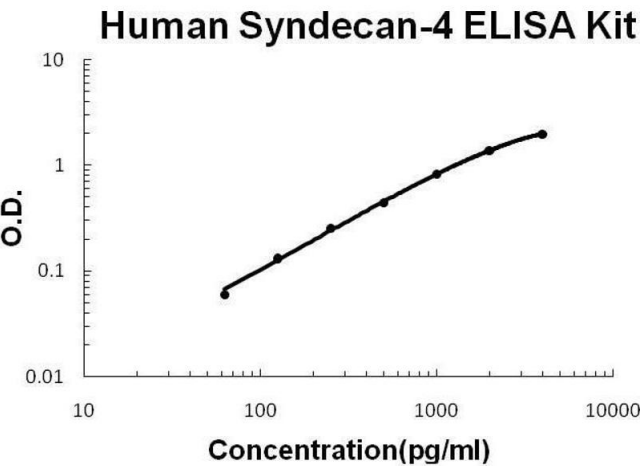
Handling

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 Syndecan-4/SDC4 PicoKine ELISA Kit standard curve