

Datasheet for ABIN1889372
CYR61 ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	CYR61
Binding Specificity:	AA 22-381
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CYR61/CCN1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva, Urine, Milk
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: CHO Immunogen sequence: A22-D381
Specificity:	Expression system for standard: CHO Immunogen sequence: A22-D381
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: CYR61

Alternative Name: CYR61 ([CYR61 Products](#))

Background: Protein Function: Promotes cell proliferation, chemotaxis, angiogenesis and cell adhesion. Appears to play a role in wound healing by up- regulating, in skin fibroblasts, the expression of a number of genes involved in angiogenesis, inflammation and matrix remodeling including VEGF-A, VEGF-C, MMP1, MMP3, TIMP1, uPA, PAI-1 and integrins alpha-3 and alpha-5. CYR61-mediated gene regulation is dependent on heparin-binding. Down-regulates the expression of alpha-1 and alpha-2 subunits of collagen type-1. Promotes cell adhesion and adhesive signaling through integrin alpha-6/beta-1, cell migration through integrin alpha-v/beta-5 and cell proliferation through integrin alpha-v/beta-3. .

Background: Cysteine-rich angiogenic inducer 61(CYR61) or CCN family member 1(CCN1), is a matricellular protein that in humans is encoded by the CYR61 gene. This gene is mapped to 1p22.3. CYR61 is capable of regulating a broad range of cellular activities, including cell adhesion, migration, proliferation, differentiation, apoptosis, and senescence through interaction with cell surface integrin receptors and heparan sulfate proteoglycans. During embryonic development, CYR61 is critical for cardiac septal morphogenesis, blood vessel formation in placenta, and vascular integrity. In adulthood CYR61 plays important roles in inflammation and tissue repair, and is associated with diseases related to chronic inflammation, including rheumatoid arthritis, atherosclerosis, diabetes-related nephropathy and retinopathy, and many different forms of cancers.

Synonyms: Protein CYR61,CCN family member 1,Cysteine-rich angiogenic inducer 61,Insulin-like growth factor-binding protein 10,IBP-10,IGF-binding protein 10,IGFBP-10,Protein GIG1,CYR61,CCN1, GIG1, IGFBP10,

Full Gene Name: Protein CYR61

Cellular Localisation: Secreted.

Gene ID: 3491

Target Details

UniProt: [O00622](#)

Pathways: [Positive Regulation of Endopeptidase Activity, Growth Factor Binding](#)

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 CCN family.

Plate: Pre-coated

Protocol: human CYR61 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CYR61 has been precoated onto 96-well plates. Standards(CHO, A22-D381) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CYR61 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 CYR61 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human CYR61 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), saliva, urine or human milk to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human CYR61 standard solution and each sample be measured in duplicate.

Assay Precision:

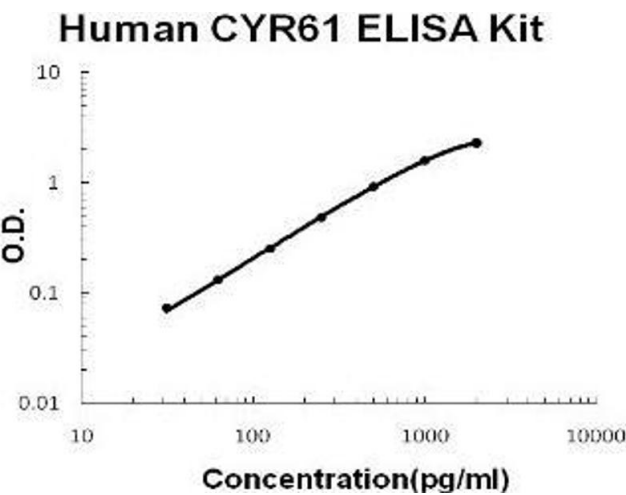
- Sample 1: n=16, Mean(pg/ml): 628, Standard deviation: 19.5, CV(%): 3.1
- Sample 2: n=16, Mean(pg/ml): 1145, Standard deviation: 36.6, CV(%): 3.2
- Sample 3: n=16, Mean(pg/ml): 1574, Standard deviation: 53.5, CV(%): 3.4,
- Sample 1: n=24, Mean(pg/ml): 570, Standard deviation: 27.93, CV(%): 4.9
- Sample 2: n=24, Mean(pg/ml): 1097, Standard deviation: 58.1, CV(%): 5.3
- Sample 3: n=24, Mean(pg/ml): 1563, Standard deviation: 96.9, CV(%): 6.2

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

Images



ELISA

Image 1. Human CYR61/CCN1 PicoKine ELISA Kit standard curve