

Datasheet for ABIN1672751
TIMP4 ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	TIMP4
Binding Specificity:	AA 30-224
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	78-5000 pg/mL
Minimum Detection Limit:	78 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human TIMP-4
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Milk
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: sf21 Immunogen sequence: C30-P224
Specificity:	Expression system for standard: sf21 Immunogen sequence: C30-P224
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:	TIMP4
Alternative Name:	TIMP4 (TIMP4 Products)
Background:	<p>Protein Function: Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Known to act on MMP-1, MMP-2, MMP-3, MMP-7 and MMP- 9.</p> <p>Background: Tissue inhibitor of metalloproteinases 4, also called Metalloproteinase inhibitor 4, is an enzyme that in humans is encoded by the TIMP4 gene. This gene belongs to the TIMP gene family. The proteins encoded by this gene family are inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. This gene is mapped to 3p25.2. The secreted, netrin domain-containing protein encoded by this gene is involved in regulation of platelet aggregation and recruitment and may play role in hormonal regulation and endometrial tissue remodeling.</p> <p>Synonyms: Metalloproteinase inhibitor 4,Tissue inhibitor of metalloproteinases 4,TIMP-4,TIMP4,</p> <p>Full Gene Name: Metalloproteinase inhibitor 4</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	7079
UniProt:	Q99727

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 protease inhibitor I35 (TIMP) family.</p> <p>Tissue Specificity: Abundant in heart and present at low levels in many other tissues.</p>
Plate:	Pre-coated
Protocol:	human TIMP-4 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent

Application Details

assay technology. A monoclonal antibody from mouse specific for TIMP-4 has been precoated onto 96-well plates. Standards(sf21, C30-P224) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TIMP-4 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 TIMP-4 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL, 78pg/mL human TIMP-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, serum, plasma(heparin , EDTA) or human milk to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human TIMP-4 standard solution and each sample is measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 566, Standard deviation: 32.83, CV(%): 5.8
- Sample 2: n=16, Mean(pg/ml): 1134, Standard deviation: 40.8, CV(%): 3.6
- Sample 3: n=16, Mean(pg/ml): 2356, Standard deviation: 115.5, CV(%): 4.9,
- Sample 1: n=24, Mean(pg/ml): 632, Standard deviation: 45.5, CV(%): 7.2
- Sample 2: n=24, Mean(pg/ml): 1274, Standard deviation: 87.91, CV(%): 6.9
- Sample 3: n=24, Mean(pg/ml): 2249, Standard deviation: 146.2, CV(%): 6.5

Restrictions: For Research Use only

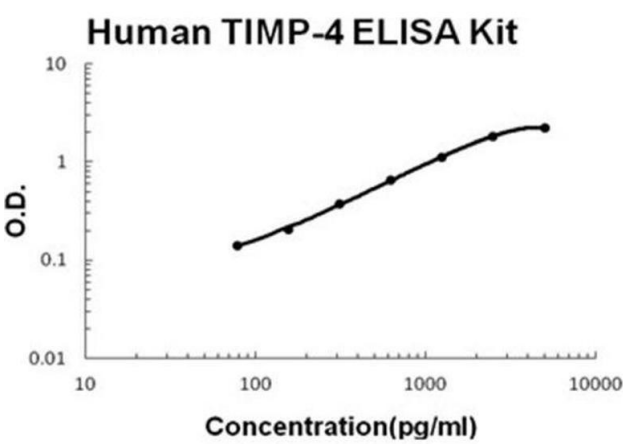
Handling

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 TIMP-4 PicoKine ELISA Kit standard curve