

Datasheet for ABIN1672826
Thrombospondin 1 ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	Thrombospondin 1 (THBS1)
Binding Specificity:	AA 19-1170
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	1.56-100 ng/mL
Minimum Detection Limit:	1.56 ng/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human THBS1/TSP1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: N19-P1170
Specificity:	Expression system for standard: NSO Immunogen sequence: N19-P1170
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<50pg/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:	Thrombospondin 1 (THBS1)
Alternative Name:	THBS1 (THBS1 Products)
Background:	<p>Protein Function: Adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. Binds heparin. May play a role in dentinogenesis and/or maintenance of dentin and dental pulp (By similarity). Ligand for CD36 mediating antiangiogenic properties. Plays a role in ER stress response, via its interaction with the activating transcription factor 6 alpha (ATF6) which produces adaptive ER stress response factors (By similarity). .</p> <p>Background: Thrombospondin 1, also known as THBS1, is a protein that in humans is encoded by the THBS1 gene. Thrombospondin 1 is a subunit of a disulfide-linked homotrimeric protein. This protein is an adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. By in situ hybridization, the THBS1 gene was mapped to human 15q15 and the cognate gene to mouse chromosome 2(region F) and was localized to 15q11-qter by Southern analysis of human-rodent somatic cell hybrids. Thrombospondin I is a multimodular secreted protein that associates with the extracellular matrix and possesses a variety of biologic functions, including a potent antiangiogenic activity. Other thrombospondin genes include thrombospondins II, III, and IV.</p> <p>Synonyms: Thrombospondin-1,THBS1,TSP, TSP1,</p> <p>Full Gene Name: Thrombospondin-1</p> <p>Cellular Localisation: Endoplasmic reticulum . Sarcoplasmic reticulum.</p>
Gene ID:	7057
UniProt:	P07996
Pathways:	Autophagy

Application Details

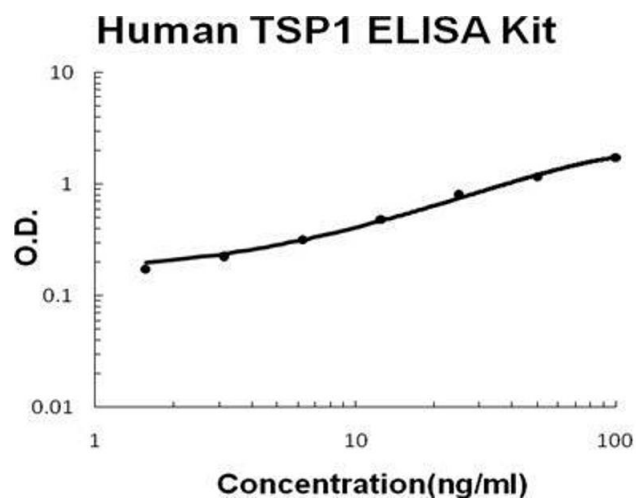
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
--------------------	--

Application Details

Comment:	Sequence similarities: Belongs to the thrombospondin family.
Plate:	Pre-coated
Protocol:	human THBS1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for THBS1 has been precoated onto 96-well plates. Standards(NSO, N19-P1170) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for THBS1 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 THBS1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 100 ng/mL, 50 ng/mL, 25 ng/mL, 1.25 ng/mL, 6.25 ng/mL, 3.12 ng/mL, 1.56 ng/mL human THBS1 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 or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human THBS1 standard solution and each sample is measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 15.5, Standard deviation: 0.93, CV(%): 6• Sample 2: n=16, Mean(ng/ml): 32, Standard deviation: 1.76, CV(%): 5.5• Sample 3: n=16, Mean(ng/ml): 52, Standard deviation: 2.08, CV(%): 4,• Sample 1: n=24, Mean(ng/ml): 16.3, Standard deviation: 1.27, CV(%): 7.8• Sample 2: n=24, Mean(ng/ml): 38, Standard deviation: 2.47, CV(%): 6.5• Sample 3: n=24, Mean(ng/ml): 64, Standard deviation: 4.61, CV(%): 7.2
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



ELISA

Image 1. Human THBS1/TSP1 PicoKine ELISA Kit standard curve