



[Go to Product page](#)

Datasheet for ABIN2859342

ADAMTS1 ELISA Kit

1 Image

1 Publication

Overview

Quantity:	96 tests
Target:	ADAMTS1
Binding Specificity:	AA 253-734
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	93.8-6000 pg/mL
Minimum Detection Limit:	93.8 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human ADAMTS1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: F253-A734
Specificity:	Expression system for standard: NSO Immunogen sequence: F253-A734
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: ADAMTS1

Alternative Name: ADAMTS1 ([ADAMTS1 Products](#))

Background: Protein Function: Cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover (By similarity). Has angiogenic inhibitor activity. Active metalloprotease, which may be associated with various inflammatory processes as well as development of cancer cachexia. May play a critical role in follicular rupture. .

Background: ADAMTS1 (A Disintegrin-Like and Metalloproteinase with Thrombospondin Type 1 Motif, 1), also known as METH1, is an enzyme that in humans is encoded by the ADAMTS1 gene. ADAMTS is a family of proteins believed to be anchored to the extracellular matrix (ECM) through interactions with aggrecan or other matrix components by one or more thrombospondin type 1 motifs. ADAMTS1 gene is mapped to 21q21.2 based on sequence similarity between the ADAMTS1 sequence and a chromosome 21q21.2 clone. It has been found that ADAMTS1 can disrupt angiogenesis in vivo and in vitro more efficiently than ADAMTS8, THBS1, or endostatin. What's more, ADAMTS1 disrupts angiogenesis in vivo and in vitro more efficiently than ADAMTS8, THBS1, or endostatin.

Synonyms: A disintegrin and metalloproteinase with thrombospondin motifs 1,ADAM-TS 1,ADAM-TS1,ADAMTS-1,3.4.24.,METH-1,ADAMTS1,KIAA1346, METH1,

Full Gene Name: A disintegrin and metalloproteinase with thrombospondin motifs 1

Cellular Localisation: Secreted, extracellular space, extracellular matrix.

Gene ID: 9510

UniProt: [Q9UHI8](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

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: Contains 1 disintegrin domain.
Plate:	Pre-coated
Protocol:	human ADAMTS1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for ADAMTS1 has been precoated onto 96-well plates. Standards(NSO, F253-A734) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for ADAMTS1 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 ADAMTS1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 6000pg/mL, 3000pg/mL, 1500pg/mL, 750pg/mL, 375pg/mL, 187.5pg/mL, 93.7pg/m human ADAMTS1 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) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human ADAMTS1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 1208, Standard deviation: 42.28, CV(%): 3.5• Sample 2: n=16, Mean(pg/ml): 2741, Standard deviation: 117.9, CV(%): 4.3• Sample 3: n=16, Mean(pg/ml): 4137, Standard deviation: 202.7, CV(%): 4.9,• Sample 1: n=24, Mean(pg/ml): 1850, Standard deviation: 98.05, CV(%): 5.3• Sample 2: n=24, Mean(pg/ml): 3035, Standard deviation: 176.03, CV(%): 5.8• Sample 3: n=24, Mean(pg/ml): 4726, Standard deviation: 302.5, CV(%): 6.4
Restrictions:	For Research Use only

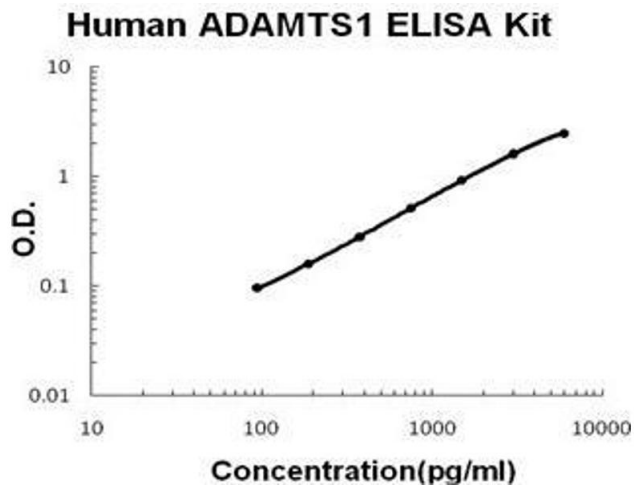
Handling

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

Publications

Product cited in: Tang, Lee, Kim, Bishop, Rodgers: "siRNA-knockdown of ADAMTS-13 modulates endothelial cell

angiogenesis." in: **Microvascular research**, Vol. 113, pp. 65-70, (2018) ([PubMed](#)).



ELISA

Image 1. Human ADAMTS1 PicoKine ELISA Kit standard curve