

Datasheet for ABIN1672869

FSTL1 ELISA Kit



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Overview

Quantity:	96 tests
Target:	FSTL1
Binding Specificity:	AA 1-308
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	312-20000 pg/mL
Minimum Detection Limit:	312 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human FSTL1
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: M1-I308
Specificity:	Expression system for standard: NSO Immunogen sequence: M1-I308
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: FSTL1

Alternative Name: FSTL1 ([FSTL1 Products](#))

Background: Protein Function: May modulate the action of some growth factors on cell proliferation and differentiation. Binds heparin (By similarity). .

Background: Follistatin-related protein 1, also called FSTL1 or FRP is a protein that in humans is encoded by the FSTL1 gene. FSTL1 gene is mapped to chromosome 3q13.33 based on an alignment of FSTL1 sequence with the genomic sequence(GRCh37). This gene encodes a protein with similarity to follistatin, an activin-binding protein. It contains an FS module, a follistatin-like sequence containing 10 conserved cysteine residues. This gene product is thought to be an autoantigen associated with rheumatoid arthritis. This gene may modulate the action of some growth factors on cell proliferation and differentiation. It was suggested that fibroblast-secreted FSTL1 acts on macrophages to increase TNF and IL1B production and IL6 activity.

Synonyms: Follistatin-related protein 1,Follistatin-like protein 1,FSTL1,FRP,

Full Gene Name: Follistatin-related protein 1

Cellular Localisation: Secreted.

Gene ID: 11167

UniProt: [Q12841](#)

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: Contains 2 EF-hand domains.

Tissue Specificity: Overexpressed in synovial tissues from rheumatoid arthritis. .

Plate: Pre-coated

Application Details

Protocol:	human FSTL1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for FSTL1 has been precoated onto 96-well plates. Standards(NSO, M1-I308) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for FSTL1 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 FSTL1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 20000pg/mL, 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL human FSTL1 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. It is recommended that each human FSTL1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.34, Standard deviation: 0.056, CV(%): 4.2• Sample 2: n=16, Mean(ng/ml): 7.2, Standard deviation: 0.382, CV(%): 5.3• Sample 3: n=16, Mean(ng/ml): 13.9, Standard deviation: 0.89, CV(%): 6.4,• Sample 1: n=24, Mean(ng/ml): 1.25, Standard deviation: 0.094, CV(%): 7.5• Sample 2: n=24, Mean(ng/ml): 7.5, Standard deviation: 0.48, CV(%): 6.4• Sample 3: n=24, Mean(ng/ml): 14.4, Standard deviation: 1.123, CV(%): 7.8
Restrictions:	For Research Use only

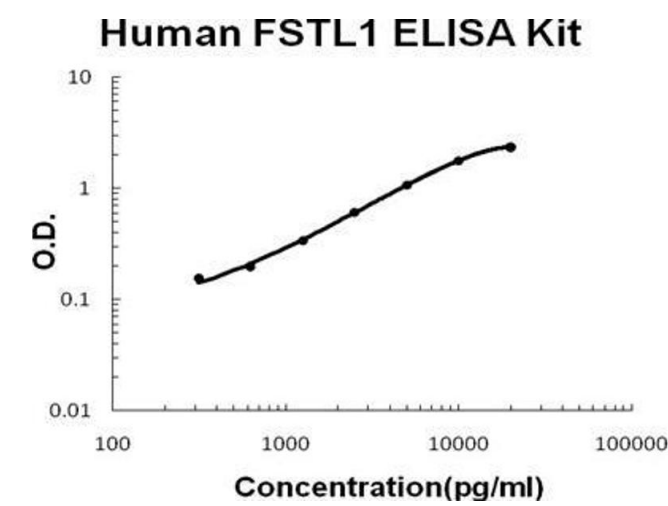
Handling

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:	Jiang, Li, Zhou, Wang, Zhang, Wang: "Colistin-induced apoptosis in PC12 cells: involvement of the mitochondrial apoptotic and death receptor pathways." in: International journal of molecular medicine , Vol. 33, Issue 5, pp. 1298-304, (2014) (PubMed).
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Xu, Liu, Wu, Gong, Zhou, Qiao: "Proapoptotic effect of metalloproteinase 9 secreted by trophoblasts on endothelial cells." in: **The journal of obstetrics and gynaecology research**, Vol. 37, Issue 3, pp. 187-94, (2011) ([PubMed](#)).



ELISA

Image 1. Human FSTL1 PicoKine ELISA Kit standard curve