Datasheet for ABIN1889410

FCN3 ELISA Kit

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Overview

Quantity:	96 tests
Target:	FCN3
Binding Specificity:	AA 24-299
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	0.78-50 ng/mL
Minimum Detection Limit:	0.78 ng/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Ficolin-3
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q24-R299
Specificity:	Expression system for standard: NSO Immunogen sequence: Q24-R299
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<20pg/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:	FCN3
Alternative Name:	FCN3 (FCN3 Products)
Background:	Protein Function: May function in innate immunity through activation of the lectin complement pathway. Calcium-dependent and GlcNAc- binding lectin. Has affinity with GalNAc, GlcNAc, D-fucose, as mono/oligosaccharide and lipopolysaccharides from S.typhimurium and S.minnesota. . Background: Ficolin-3, also known as HAKA1, is a protein that in humans is encoded by the FCN3 gene. It is mapped to 1p36.11. The protein can activate the complement pathway in association with MASPs and sMAP, thereby aiding in host defense through the activation of the lectin pathway. Ficolin-3 is expressed as a 35-kD protein that reacts with systemic lupus erythematosus sera. Ficolin-3 does not bind fibronectin(FN1), elastin(ELN), or zymosan, and the lectin activity of the Ficolin-3 is calcium independent. Homozygosity for the variant in the FCN3 gene results in a recessive complement deficiency syndrome. Synonyms: Ficolin-3,Collagen/fibrinogen domain-containing lectin 3 p35,Collagen/fibrinogen domain-containing protein 3,Hakata antigen,FCN3,FCNH, HAKA1, Full Gene Name: Ficolin-3 Cellular Localisation: Secreted. Found in blood plasma, bronchus, alveolus and bile duct.
Gene ID:	8547
UniProt:	O75636
Pathways:	Complement System

Application Details

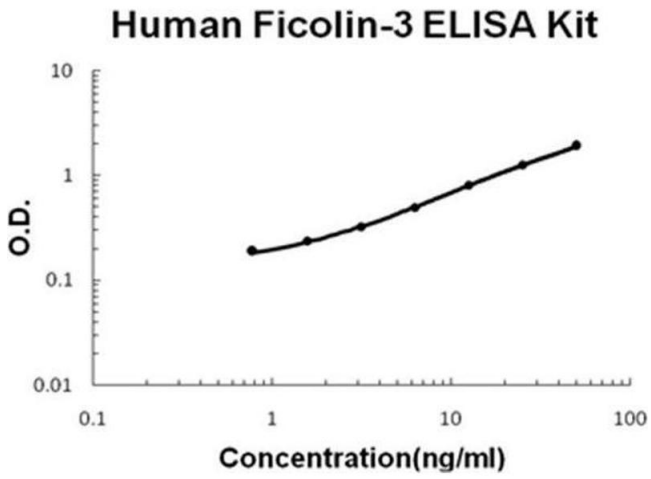
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the ficolin lectin family.

Application Details

	Tissue Specificity: Liver and lung. In liver it is produced by bile duct epithelial cells and hepatocytes. In lung it is produced by both ciliated bronchial epithelial cells and type II alveolar epithelial cells. .
Plate:	Pre-coated
Protocol:	human Ficolin-3 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Ficolin-3 has been precoated onto 96-well plates. Standards(NSO, Q24-R299) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Ficolin-3 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 Ficolin-3 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 50 ng/mL, 25 ng/mL, 12.5 ng/mL, 6.25 ng/mL, 3.12 ng/mL, 1.56 ng/mL, 0.78 ng/mL human Ficolin-3 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 Ficolin-3 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 4.88, Standard deviation: 0.215, CV(%): 4.4 • Sample 2: n=16, Mean(ng/ml): 12.6, Standard deviation: 0.466, CV(%): 3.7 • Sample 3: n=16, Mean(ng/ml): 25.5, Standard deviation: 1.17, CV(%): 4.6, • Sample 1: n=24, Mean(ng/ml): 5.14, Standard deviation: 0.35, CV(%): 6.8 • Sample 2: n=24, Mean(ng/ml): 13.6, Standard deviation: 1.02, CV(%): 7.5 • Sample 3: n=24, Mean(ng/ml): 25.7, Standard deviation: 1.98, CV(%): 7.7
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 Ficolin-3 PicoKine ELISA Kit standard curve

