

Datasheet for ABIN1672874
Granulin ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	Granulin (GRN)
Binding Specificity:	AA 18-593
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 Progranulin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva, Urine, Milk
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: T18-L593
Specificity:	Expression system for standard: NSO Immunogen sequence: T18-L593
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:	Granulin (GRN)
Alternative Name:	GRN (GRN Products)
Target Type:	Viral Protein
Background:	<p>Protein Function: Granulins have possible cytokine-like activity. They may play a role in inflammation, wound repair, and tissue remodeling.</p> <p>Background: Granulin, also known as Proepithelin(PEPI) is a protein that in humans is encoded by the GRN gene. This gene is mapped to 17q21.31. Granulins are a family of secreted, glycosylated peptides that are cleaved from a single precursor protein with 7.5 repeats of a highly conserved 12-cysteine granulin/epithelin motif. The 88 kDa precursor protein, progranulin, is also called proepithelin and PC cell-derived growth factor. Cleavage of the signal peptide produces mature granulin which can be further cleaved into a variety of active, 6 kDa peptides. These smaller cleavage products are named granulin A, granulin B, granulin C, etc. Epithelins 1 and 2 are synonymous with granulins A and B, respectively. Both the peptides and intact granulin protein regulate cell growth. However, different members of the granulin protein family may act as inhibitors, stimulators, or have dual actions on cell growth. Granulin family members are important in normal development, wound healing, and tumorigenesis.</p> <p>Synonyms: Granulins,Proepithelin,PEPI,Acrogranin,Glycoprotein of 88 Kda,GP88,Glycoprotein 88,Progranulin,Paragranulin,Granulin-1,Granulin G,Granulin-2,Granulin F,Granulin-3,Granulin B,Granulin-4,Granulin A,Granulin-5,Granulin C,Granulin-6,Granulin D,Granulin-7,Granulin E,GRN,</p> <p>Full Gene Name: Granulins</p> <p>Cellular Localisation: Secreted.</p>

Gene ID:	2896
UniProt:	P28799

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
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Application Details

	assay was recommended for both standard and sample testing.
Comment:	<p>Sequence similarities: Belongs to the granulin family.</p> <p>Tissue Specificity: In myelogenous leukemic cell lines of promonocytic, promyelocytic, and proerythroid lineage, in fibroblasts, and very strongly in epithelial cell lines. Present in inflammatory cells and bone marrow. Highest levels in kidney.</p>
Plate:	Pre-coated
Protocol:	human Progranulin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Progranulin has been precoated onto 96-well plates. Standards(NSO, T18-L593) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Progranulin 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 Progranulin 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 Progranulin 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), saliva, urine or human milk to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human Progranulin standard solution and each sample is measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 15.4, Standard deviation: 0.986, CV(%): 6.4• Sample 2: n=16, Mean(ng/ml): 37.7, Standard deviation: 2, CV(%): 5.3• Sample 3: n=16, Mean(ng/ml): 56, Standard deviation: 2.69, CV(%): 4.8,• Sample 1: n=24, Mean(ng/ml): 13.6, Standard deviation: 1.02, CV(%): 7.5• Sample 2: n=24, Mean(ng/ml): 32.8, Standard deviation: 2.69, CV(%): 8.2• Sample 3: n=24, Mean(ng/ml): 61, Standard deviation: 4.76, CV(%): 7.8
Restrictions:	For Research Use only

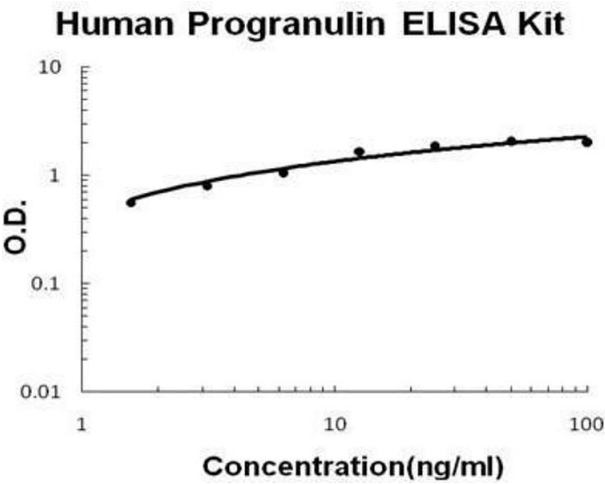
Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C, 4 °C

Handling

Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Images



ELISA

Image 1. Human Progranulin PicoKine ELISA Kit standard curve