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Datasheet for ABIN1889363

## Granulin ELISA Kit

### 1 Image

#### Overview

Quantity:	96 tests
Target:	Granulin (GRN)
Binding Specificity:	AA 18-589
Reactivity:	Mouse
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 Mouse Progranulin
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: T18-L589
Specificity:	Expression system for standard: NSO Immunogen sequence: T18-L589
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

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Sensitivity: <10pg/mL

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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

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Target: Granulin (GRN)

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

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Target Type: Viral Protein

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Background: Protein Function: Granulins have possible cytokine-like activity. They may play a role in inflammation, wound repair, and tissue remodeling. Acts as an autocrine growth factor for PC cells. .

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.

Synonyms: Granulins,PC cell-derived growth factor,PCDGF,Proepithelin,PEPI,Acrogranin,Progranulin,Granulin-1,Granulin-2,Granulin-3,Granulin-4,Granulin-5,Granulin-6,Granulin-7,Grn,

Full Gene Name: Granulins

Cellular Localisation: Secreted.

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Gene ID: 14824

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UniProt: [P28798](#)

## Application Details

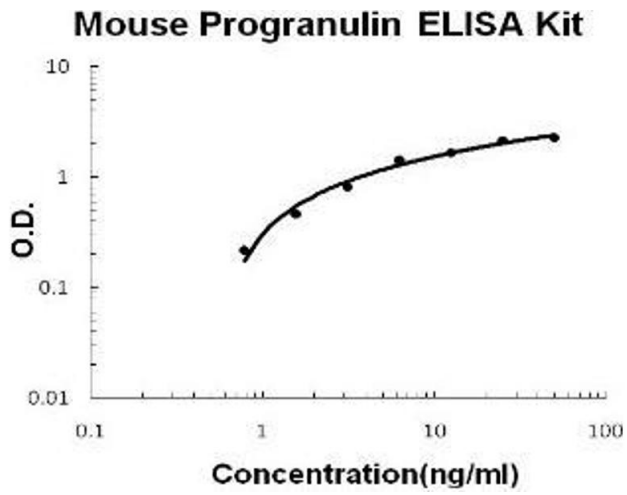
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Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Ubiquitous.
Plate:	Pre-coated
Protocol:	mouse Progranulin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Progranulin has been precoated onto 96-well plates. Standards(NSO, T18-L589) 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 mouse Progranulin 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 mouse 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 mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each mouse Progranulin standard solution and each sample is measured in duplicate.
Assay Precision:	Samnle 1: n=16, Mean(ng/ml): 8.6, Standard deviation: 0.473, CV(%): 5.5 Samnle 2: n=16, Mean(ng/ml): 20, Standard deviation: 1.24, CV(%): 6.2 Samnle 3: n=16, Mean(ng/ml): 31.5, Standard deviation: 1.638, CV(%): 5.2, Samnle 1: n=24, Mean(ng/ml): 9.1, Standard deviation: 0.582, CV(%): 6.4 Samnle 2: n=24, Mean(ng/ml): 25.2, Standard deviation: 1.84, CV(%): 7.3 Samnle 3: n=24, Mean(ng/ml): 36.8, Standard deviation: 2.392, CV(%): 6.5
Restrictions:	For Research Use only

## Handling

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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.** Mouse Progranulin PicoKine ELISA Kit standard curve