### For Research Use Only

# Progranulin/PGRN Polyclonal antibody

Catalog Number:10053-1-AP 2 Publications



**Basic Information** 

Catalog Number: 10053-1-AP

Size: 1500 ug/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG0010

64 kDa

Observed MW: 64 kDa

BC010577

2896

P28799 Full Name:

granulin Calculated MW:

GeneID (NCBI):

**UNIPROT ID:** 

GenBank Accession Number:

**Purification Method:** Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000 IHC 1:50-1:500

**Applications** 

**Tested Applications:** WB, IHC, ELISA **Cited Applications:** 

IHC. IF

Species Specificity:

human **Cited Species:** human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: A431 cells, HEK-293 cells, MCF-7 cells

IHC: human colon cancer tissue, human liver cancer

## **Background Information**

GRN, also known as PGRN or PCDGF, is a cysteine-rich protein of 68.5 kDa that is typically secreted into a highly glycosylated 88 kDa form. PGRN is a unique growth factor that plays an important role in cutaneous wound healing. It has an anti-inflammatory effect and promotes cell proliferation. When PCDGF is degraded to several 6-25 kDa fragments, called granulins (GRNs) by neutrophil proteases, a pro-inflammatory reaction occurs. PGRN is widely expressed, particularly in epithelial cells, immune cells, neurons, and chondrocytes. High levels of PGRN expression have been reported in human cancers, and its expression is closely correlated with the development and metastasis of several cancers. The recent discovery that mutations in the gene encoding for pro-granulin (GRN) cause frontotemporal lobar degeneration (FTLD), and other neurodegenerative diseases leading to dementia, has brought renewed interest in progranulin and its functions in the central nervous system. Several in vitro studies have revealed that PGRN is classified into two isoforms according to its glycosylation status, the glycosylated immature isoform (58-68 kDa) and the fully glycosylated mature secretory isoform (88 kDa) (PMID: 25838514).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Guanshen Cui	37084418	Cell Prolif	IF
Chen Xiang-yu XY	18706200	Chin Med J (Engl)	IHC

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

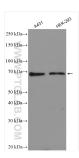
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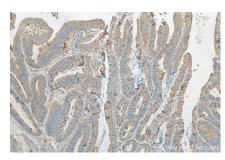
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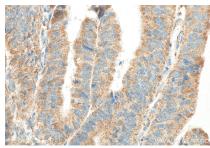
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 10053-1-AP (Granulin antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10053-1-AP (Granulin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10053-1-AP (Granulin antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).