

# GRN Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20450b

## **Product Information**

**Application** WB, IHC-P, E **Primary Accession** P28799 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Calculated MW** 63544 **Antigen Region** 563-591

## **Additional Information**

**Gene ID** 2896

Other Names Granulins, Proepithelin, PEPI, Acrogranin, Glycoprotein of 88 Kda,

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

**Target/Specificity** This GRN antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 563-591 amino acids from the

C-terminal region of human GRN.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** GRN Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

## **Protein Information**

Name GRN ( HGNC:4601)

**Function** Secreted protein that acts as a key regulator of lysosomal function and as a

growth factor involved in inflammation, wound healing and cell proliferation

(PubMed: 12526812, PubMed: 18378771, PubMed: 28073925,

PubMed:28453791, PubMed:28541286). Regulates protein trafficking to lysosomes, and also the activity of lysosomal enzymes (PubMed:28453791, PubMed:28541286). Also facilitates the acidification of lysosomes, causing degradation of mature CTSD by CTSB (PubMed:28073925). In addition, functions as a wound-related growth factor that acts directly on dermal fibroblasts and endothelial cells to promote division, migration and the formation of capillary-like tubule structures (By similarity). Also promotes epithelial cell proliferation by blocking TNF-mediated neutrophil activation preventing release of oxidants and proteases (PubMed:12526812). Moreover, modulates inflammation in neurons by preserving neurons survival, axonal outgrowth and neuronal integrity (PubMed:18378771).

#### **Cellular Location**

Secreted. Lysosome Note=Endocytosed by SORT1 and delivred to lysosomes (PubMed:21092856, PubMed:28073925). Targeted to lysosome by PSAP via M6PR and LRP1, in both biosynthetic and endocytic pathways (PubMed:26370502, PubMed:28073925). Co-localized with GBA1 in the intracellular trafficking compartments until to lysosome (By similarity) {ECO:0000250|UniProtKB:P28798, ECO:0000269|PubMed:21092856, ECO:0000269|PubMed:26370502, ECO:0000269|PubMed:28073925}

#### **Tissue Location**

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

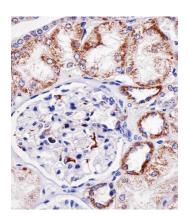
## **Background**

Granulins have possible cytokine-like activity. They may play a role in inflammation, wound repair, and tissue remodeling. Granulin-4 promotes proliferation of the epithelial cell line A431 in culture while granulin-3 acts as an antagonist to granulin-4, inhibiting the growth.

### References

Bhandari V., et al. Biochem. Biophys. Res. Commun. 188:57-63(1992). Plowman G.D., et al. J. Biol. Chem. 267:13073-13078(1992). Bhandari V., et al. Proc. Natl. Acad. Sci. U.S.A. 89:1715-1719(1992). Lu R., et al. Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases. Yu W., et al. Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.

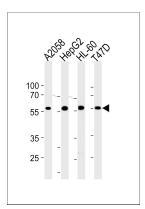
# **Images**



Immunohistochemical analysis of paraffin-embedded H. kidney section using GRN Antibody (C-term)(Cat#AP20450b). AP20450b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

GRN Antibody (C-term) (Cat. #AP20450b) western blot analysis in A2058,HepG2,HL-60,T47D cell line lysates (35ug/lane).This demonstrates the GRN antibody

detected the GRN protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.