

**GRN Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20450b**

**Specification**

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**GRN Antibody (C-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P28799</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>63544</b>
Antigen Region	<b>563-591</b>

**GRN Antibody (C-term) - 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~~1:25

**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.

**GRN Antibody (C-term) - 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](#)). Facilitates also 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 delivered 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

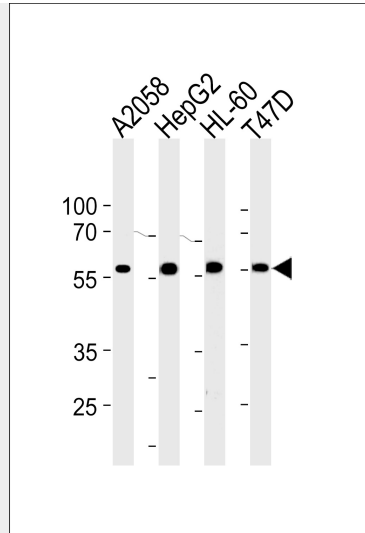
#### **GRN Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

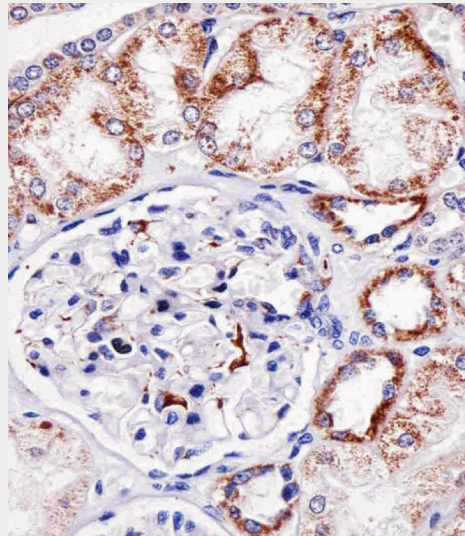
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **GRN Antibody (C-term) - Images**





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).



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) - 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.

#### **GRN Antibody (C-term) - 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.