

**GRN / Granulin Antibody**  
**Pig Polyclonal Antibody**  
**Catalog # ALS17236****Specification**

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**GRN / Granulin Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | <b>IHC-P, WB</b>       |
| Primary Accession | <a href="#">P28799</a> |
| Other Accession   | <a href="#">2896</a>   |
| Reactivity        | <b>Human</b>           |
| Host              | <b>Pig</b>             |
| Clonality         | <b>Polyclonal</b>      |
| Calculated MW     | <b>63544</b>           |

**GRN / Granulin Antibody - Additional Information****Gene ID** 2896**Other Names**

GRN, Acrogranin, CLN11, Epithelin precursor, GEP, gp88, Granulin, Granulin-epithelin, Granulins, PC cell-derived growth factor, PCDGF, PEPI, PGRN, Proepithelin, Progranulin

**Target/Specificity**

Recognizes human progranulin. Detects a band of ~90kDa by Western blot. Weakly cross-reacts with mouse progranulin. Cross-reacts with hGRN-C and hGRN-F.

**Reconstitution & Storage**

PBS, pH 7.4, no preservatives. Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

**Precautions**

GRN / Granulin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GRN / Granulin Antibody - 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:[28541286](http://www.uniprot.org/citations/28541286), PubMed:[28073925](http://www.uniprot.org/citations/28073925), PubMed:[18378771](http://www.uniprot.org/citations/18378771), PubMed:[28453791](http://www.uniprot.org/citations/28453791), PubMed:[12526812](http://www.uniprot.org/citations/12526812)). Regulates protein trafficking to lysosomes and, also the activity of lysosomal enzymes (PubMed:[28453791](http://www.uniprot.org/citations/28453791), PubMed:[28541286](http://www.uniprot.org/citations/28541286)). Facilitates

also the acidification of lysosomes, causing degradation of mature CTSD by CTSB (PubMed:<a href="http://www.uniprot.org/citations/28073925" target="\_blank">28073925</a>). 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:<a href="http://www.uniprot.org/citations/12526812" target="\_blank">12526812</a>). Moreover, modulates inflammation in neurons by preserving neurons survival, axonal outgrowth and neuronal integrity (PubMed:<a href="http://www.uniprot.org/citations/18378771" target="\_blank">18378771</a>).

#### **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

#### **Volume**

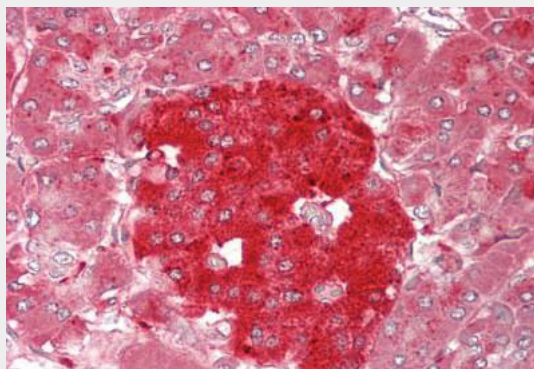
50 µl

#### **GRN / Granulin Antibody - Protocols**

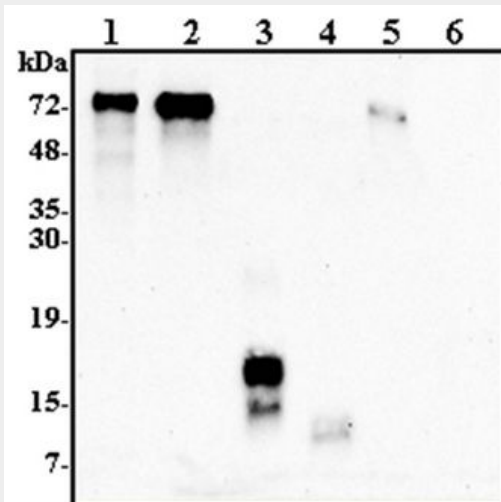
Provided below are standard protocols that you may find useful for product applications.

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

#### **GRN / Granulin Antibody - Images**



## Human Pancreas: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western blot analysis using anti-Progranulin (human), pAb at 1:2000 dilution.

**GRN / Granulin Antibody - Background**

Granulins have possible cytokine-like activity. They may play a role in inflammation, wound repair, and tissue remodeling.

**GRN / Granulin Antibody - 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.