

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

GRN / Granulin Antibody - Product Information

Application	IHC-P, WB
Primary Accession	P28799
Other Accession	2896
Reactivity	Human
Host	Pig
Clonality	Polyclonal
Calculated MW	63544

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: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

Volume

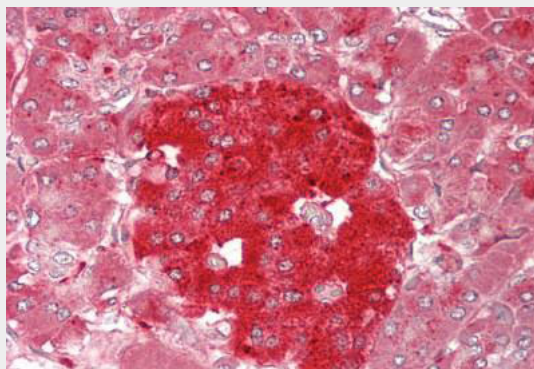
50 µl

GRN / Granulin Antibody - Protocols

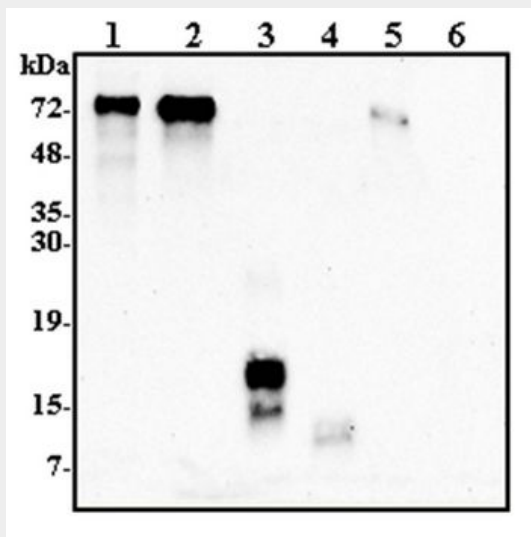
Provided below are standard protocols that you may find useful for product applications.

- [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.