

Granulin Antibody

Rabbit mAb Catalog # AP92340

## Specification

# **Granulin Antibody - Product Information**

ApplicationWB, IHC, FC, ICC, IPPrimary AccessionP28799ClonalityMonoclonalOther NamesAcrogranin; CLN11; GEP; GP88; Granulins; GRN; PCDGF; PEPI; PGRN; Proepithelin; Progranulin;

| Isotype       | Rabbit IgG |
|---------------|------------|
| Host          | Rabbit     |
| Calculated MW | 63544 Da   |

## Granulin Antibody - Additional Information

| -    |        |  |
|------|--------|--|
| 1.11 | lution |  |
|      | acion  |  |
|      |        |  |

Purification Immunogen

Description

Storage Condition and Buffer

WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A Affinity-chromatography A synthesized peptide derived from human Granulin Granulins have possible cytokine-like activity. They may play a role in inflammation, wound repair, and tissue remodeling. Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## **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:<a

href="http://www.uniprot.org/citations/12526812" target="\_blank">12526812</a>, PubMed:<a
href="http://www.uniprot.org/citations/18378771" target="\_blank">18378771</a>, PubMed:<a
href="http://www.uniprot.org/citations/28073925" target="\_blank">28073925</a>, PubMed:<a
href="http://www.uniprot.org/citations/28453791" target="\_blank">28073925</a>, PubMed:<a
href="http://www.uniprot.org/citations/28453791" target="\_blank">28453791</a>, PubMed:<a
href="http://www.uniprot.org/citations/28541286" target="\_blank">28541286</a>). Regulates
protein trafficking to lysosomes, and also the activity of lysosomal enzymes (PubMed:<a/a>



href="http://www.uniprot.org/citations/28453791" target="\_blank">28453791</a>, PubMed:<a href="http://www.uniprot.org/citations/28541286" target="\_blank">28541286</a>). Also facilitates 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 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

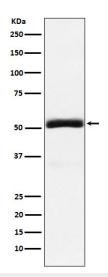
#### Granulin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Granulin Antibody - Images





Western blot analysis of Granulin expression in 293T cell lysate.