

**KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody**  
**Mouse monoclonal antibody**  
**Catalog # AGI1950****Specification****KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P28799</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	Predicted, 64 kDa, observed, 73 kDa kDa
Gene Name	GRN
Aliases	GRN; Granulin Precursor; PCDGF; PGRN; Progranulin; CLN11; PC Cell-Derived Growth Factor; Glycoprotein Of 88 Kda; Glycoprotein 88; Proepithelin; Acrogranin; GP88; PEPI; Epithelin Precursor; Granulin-Epithelin; Epithelin; Granulins; GEP
Immunogen	Recombinant protein of human GRN

**KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody - Additional Information**

Gene ID	2896
<b>Other Names</b>	
Progranulin, PGRN, Acrogranin, Granulin A, Granulin-5, Granulin C, Granulin-6, Granulin D, Granulin-7, Granulin E, GRN ( <a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4601" target="_blank">http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4601</a> )	
HGNC:4601	

**KD-Validated Anti-Granulin Precursor Mouse Monoclonal 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:[12526812](http://www.uniprot.org/citations/12526812), PubMed:[18378771](http://www.uniprot.org/citations/18378771), PubMed:[28073925](http://www.uniprot.org/citations/28073925), PubMed:[28453791](http://www.uniprot.org/citations/28453791), PubMed:[28541286](http://www.uniprot.org/citations/28541286)). 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)). 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 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

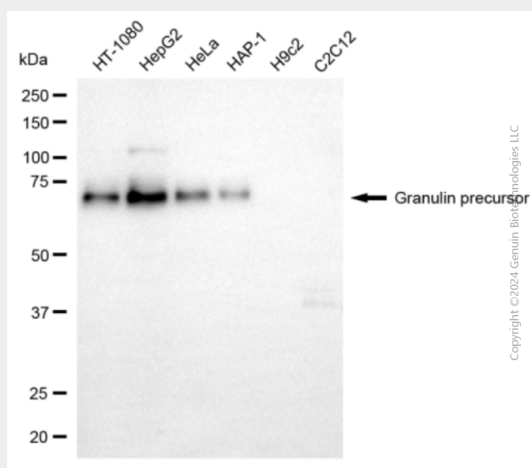
In myelogenous leukemic cell lines of promonocytic, promyelocytic, and proerythroid lineage, in fibroblasts, and very strongly in epithelial cell lines. Present in inflammatory cells and bone marrow. Highest levels in kidney

## KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody - Protocols

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

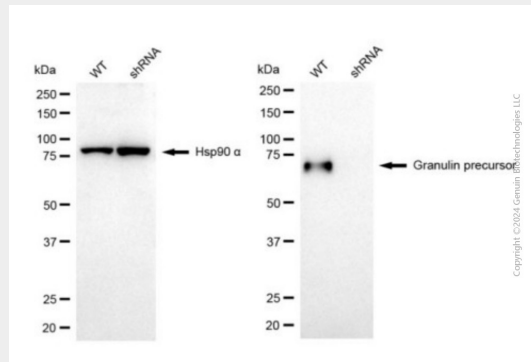
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-granulin precursor antibody (Cat#AGI1950). Total cell lysates

(30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-granulin precursor antibody (Cat#AGI1950, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-granulin precursor antibody (Cat#AGI1950). Granulin precursor expression in wild type (WT) and granulin precursor (GRN) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-granulin precursor antibody (Cat#AGI1950, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.