

# KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody

Mouse monoclonal antibody  
Catalog # AGI1950

## Product Information

---

|                   |                                                                                                                                                                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application       | WB                                                                                                                                                                                                                                         |
| Primary Accession | <a href="#">P28799</a>                                                                                                                                                                                                                     |
| Reactivity        | Human                                                                                                                                                                                                                                      |
| Clonality         | Monoclonal                                                                                                                                                                                                                                 |
| Isotype           | Mouse IgG1                                                                                                                                                                                                                                 |
| Clone Names       | 24GB6595                                                                                                                                                                                                                                   |
| Calculated MW     | 63544                                                                                                                                                                                                                                      |
| 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                                                                                                                                                                                                           |

## Additional Information

---

|             |                                                                                                                                                      |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID     | 2896                                                                                                                                                 |
| Other Names | Progranulin, PGRN, Acrogranin, Granulin A, Granulin-5, Granulin C, Granulin-6, Granulin D, Granulin-7, Granulin E, GRN ( <a href="#">HGNC:4601</a> ) |

## Protein Information

---

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name     | GRN ( <a href="#">HGNC:4601</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 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="#">12526812</a> , PubMed: <a href="#">18378771</a> , PubMed: <a href="#">28073925</a> , PubMed: <a href="#">28453791</a> , PubMed: <a href="#">28541286</a> ). Regulates protein trafficking to lysosomes, and also the activity of lysosomal enzymes (PubMed: <a href="#">28453791</a> , PubMed: <a href="#">28541286</a> ). Also facilitates the acidification of lysosomes, causing degradation of mature CTSD by CTSB (PubMed: <a href="#">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="#">12526812</a> ). Moreover, modulates inflammation in neurons by preserving neurons survival, axonal outgrowth and neuronal integrity (PubMed: <a href="#">18378771</a> ). |

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cellular Location</b> | 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} |
| <b>Tissue Location</b>   | 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                                                                                                                                                                                                                                         |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.