

Granulin Antibody

Rabbit mAb Catalog # AP92340

Product Information

Application WB, IHC, IF, FC, ICC, IP, IHF

Primary Accession P28799
Reactivity Human
Clonality Monoclonal

Other Names Acrogranin; CLN11; GEP; GP88; Granulins; GRN; PCDGF; PEPI; PGRN;

Proepithelin; Progranulin;

IsotypeRabbit IgGHostRabbitCalculated MW63544

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:100

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human Granulin

Description Granulins have possible cytokine-like activity. They may play a role in

inflammation, wound repair, and tissue remodeling.

Storage Condition and Buffer 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.

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, PubMed: 18378771, PubMed: 28073925,

PubMed:<u>28453791</u>, PubMed:<u>28541286</u>). Regulates protein trafficking to lysosomes, and also the activity of lysosomal enzymes (PubMed:<u>28453791</u>, PubMed:<u>28541286</u>). Also facilitates the acidification of lysosomes, causing degradation of mature CTSD by CTSB (PubMed:<u>28073925</u>). 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:<u>12526812</u>). Moreover,

modulates inflammation in neurons by preserving neurons survival, axonal outgrowth and neuronal integrity (PubMed: 18378771).

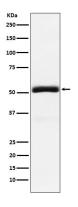
Cellular Location Secreted. Lysosome Note=Endocytosed by SORT1 and delivred to lysosomes

(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

Images



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

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