10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Granulin Precursor Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI1950

Product Information

Application	WB
Primary Accession	P28799
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 (HGNC:4601)

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:28453791, PubMed:28541286). Regulates protein trafficking to lysosomes, and also the activity of lysosomal enzymes (PubMed:28453791, PubMed:28541286). Also facilitates 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 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

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