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Anti-Granulin Antibody

Rabbit polyclonal antibody to Granulin
Catalog # AP61369

Product Information

Application	WB
Primary Accession	P28799
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63544

Additional Information

Gene ID	2896
Other Names	Granulins; Proepithelin; PEPI
Target/Specificity	Recognizes endogenous levels of Granulin protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

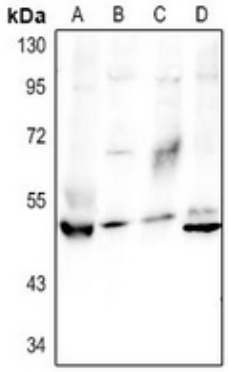
Name	GRN (HGNC:4601)
Function	Secreted protein that acts as a key regulator of lysosomal function and as a growth factor involved in inflammation, wound healing and cell proliferation (PubMed:12526812, PubMed:18378771, PubMed:28073925, PubMed:28453791, PubMed:28541286). Regulates protein trafficking 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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Granulin. The exact sequence is proprietary.

Images



Western blot analysis of Granulin expression in rat kidney (A), HEK293T (B), Jurkat (C), Beas2B (D) whole cell lysates.