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Progranulin aa248-259 / Granulin-3 Antibody (internal)

Peptide-affinity purified goat antibody
Catalog # AF3703a

Specification

Progranulin aa248-259 / Granulin-3 Antibody (internal) - Product Information

Application	**WB**
Primary Accession	P28799
Other Accession	NP_002078.1, 2896
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**63544**

Progranulin aa248-259 / Granulin-3 Antibody (internal) - Additional Information

Gene ID 2896

Other Names
Granulins, Proepithelin, PEPI, Acrogranin, Glycoprotein of 88 Kda, GP88, Glycoprotein 88, Progranulin, Paragranulin, Granulin-1, Granulin G, Granulin-2, Granulin F, Granulin-3, Granulin B, Granulin-4, Granulin A, Granulin-5, Granulin C, Granulin-6, Granulin D, Granulin-7, Granulin E, GRN

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Progranulin aa248-259 / Granulin-3 Antibody (internal) is for research use only and not for use in diagnostic or therapeutic procedures.

Progranulin aa248-259 / Granulin-3 Antibody (internal) - 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:28541286, PubMed:28073925, PubMed:18378771, PubMed:28453791, PubMed:<a

href="http://www.uniprot.org/citations/12526812" target="_blank">12526812). Regulates protein trafficking to lysosomes and, also the activity of lysosomal enzymes (PubMed:28453791, PubMed:28541286). Facilitates also 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

Progranulin aa248-259 / Granulin-3 Antibody (internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Progranulin aa248-259 / Granulin-3 Antibody (internal) - Images

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AF3703a (1 µg/ml) staining of A431 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Progranulin aa248-259 / Granulin-3 Antibody (internal) - Background

This antibody is expected to recognize the C-Terminal part of Granulin-3.

Progranulin aa248-259 / Granulin-3 Antibody (internal) - References

Rescue of progranulin deficiency associated with frontotemporal lobar degeneration by alkalizing reagents and inhibition of vacuolar ATPase. Capell A, Liebscher S, Fellerer K, Brouwers N, Willem M, Lammich S, Gijselinck I, Bittner T, Carlson AM, Sasse F, Kunze B, Steinmetz H, Jansen R, Dormann D, Sleegers K, Cruts M, Herms J, Van Broeckhoven C, Haass C. J Neurosci. 2011 Feb 2;31(5):1885-94. PMID: 21289198