

Rabbit Anti-Granulin antibody

SL0823R

Product Name	Granulin
Chinese Name	颗粒蛋白前体抗体
Alias	Granulin; Acrogranin; GEP; GP88; Granulin epithelin; GRN; PC cell derived growth factor; PCDGF; PEPI; PGRN; Proepithelin; Progranulin.
Research Area	Tumour immunology Neurobiology Signal transduction
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, (predicted: Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Guinea Pig,) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	63kDa
Cellular localization	Secretory protein
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PGNR: 451-550/593
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product	Granulins are a family of secreted, glycosylated peptides that are cleaved from a single

Detail

precursor protein with 7.5 repeats of a highly conserved 12-cysteine granulin/epithelin motif. The 88 kDa precursor protein, progranulin, is also called proepithelin and PC cell-derived growth factor. Cleavage of the signal peptide produces mature granulin which can be further cleaved into a variety of active, 6 kDa peptides. These smaller cleavage products are named granulin A, granulin B, granulin C, etc. Epithelins 1 and 2 are synonymous with granulins A and B, respectively. Both the peptides and intact granulin protein regulate cell growth. However, different members of the granulin protein family may act as inhibitors, stimulators, or have dual actions on cell growth. Granulin family members are important in normal development, wound healing, and tumorigenesis.

Function:

Granulins have possible cytokine-like activity. They may play a role in inflammation, wound repair, and tissue remodeling.

Granulin-4 promotes proliferation of the epithelial cell line A431 in culture while granulin-3 acts as an antagonist to granulin-4, inhibiting the growth.

Subcellular Location:

Secreted.

Tissue Specificity:

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.

Post-translational modifications:

Granulins are disulfide bridged.

DISEASE:

Defects in GRN are the cause of ubiquitin-positive frontotemporal dementia (UP-FTD) [MIM:607485]; also known as tau-negative frontotemporal dementia linked to chromosome 17. Frontotemporal dementia (FTD) is the second most common cause of dementia in people under the age of 65 years. It is an autosomal dominant neurodegenerative disease.

Similarity:

Belongs to the granulin family.

SWISS:

P28799

Gene ID:

2896

Database links:

[Entrez Gene: 2896](#) Human

[Entrez Gene: 14824](#) Mouse

[Omim: 138945](#) Human

[SwissProt: P28799](#) Human

[SwissProt: P28798](#) Mouse

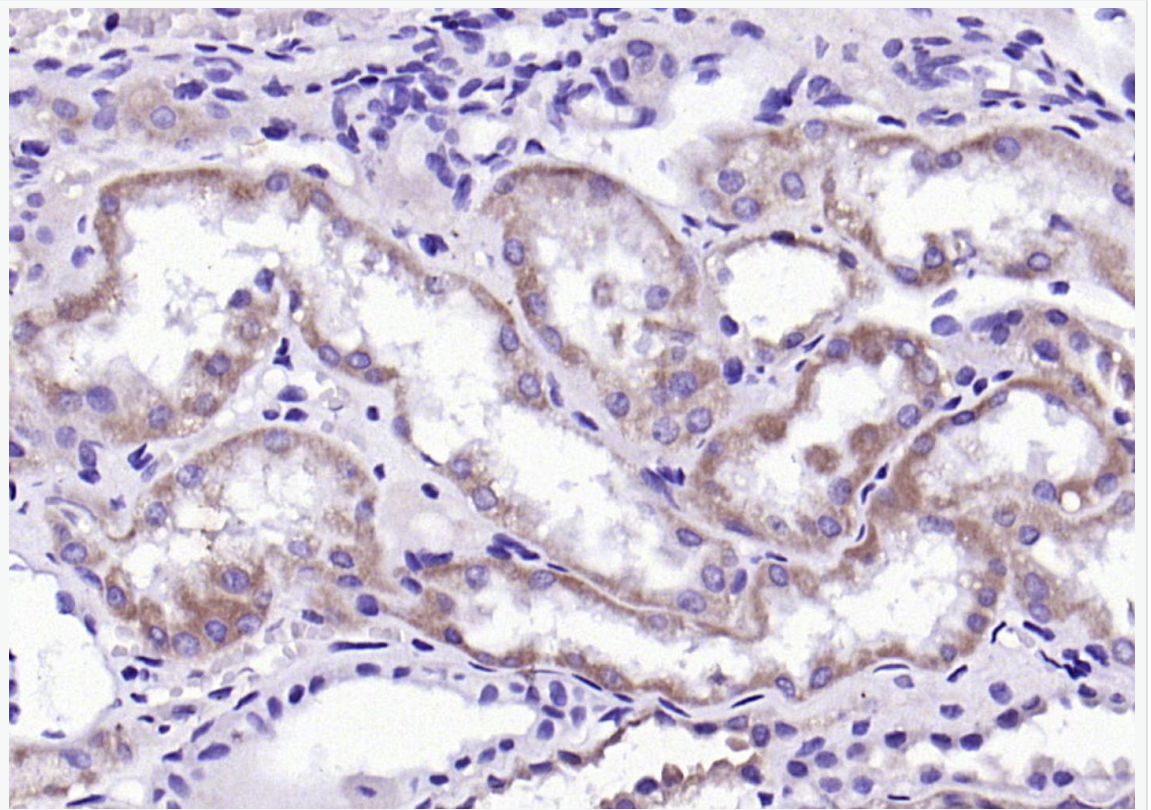
[Unigene: 514220](#) Human

[Unigene: 1568](#) Mouse

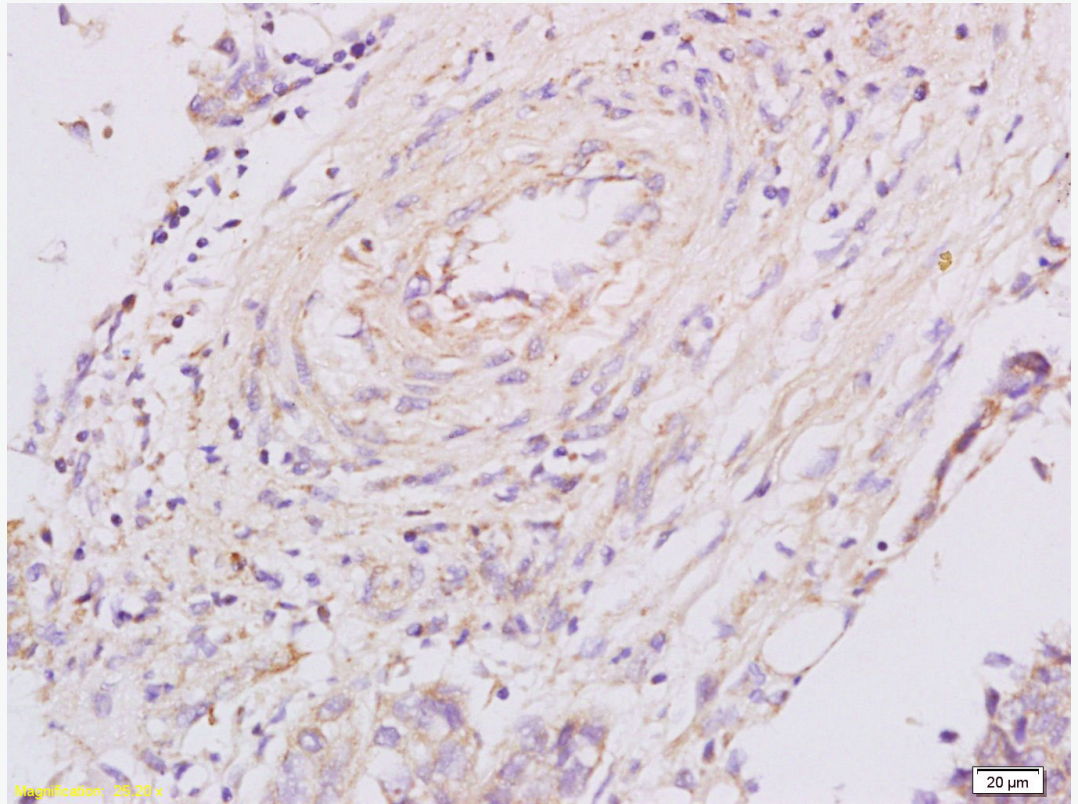
1.PGRN目前主要用于老年痴呆疾病。是65岁以下人群中第二种最常见的痴呆形式，该蛋白的多量产生，能够损坏记忆和个性，而且还可能影响运动。这一发现也许可帮助解决关于该疾病病因的困惑：痴呆症(FTD)是常见的神经退化疾病，可见，除微管相关的tau蛋白导致痴呆症外，又一个新的与痴呆症有关蛋白又被科学家发现。

2.颗粒蛋白前体(PGRN)在调节生长发育、损伤修复和促进细胞增殖等方面发挥重要作用。PGRN能促进Tumour细胞过度增殖、增强细胞向外周侵袭的能力以及促进Tumour组织血管新生，提示它可能是Tumour治疗的一个非常重要的靶标。

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Granulin) Polyclonal Antibody, Unconjugated (SL0823R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: Human esophageal carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-PGRN/Granulin Polyclonal Antibody, Unconjugated(SL0823R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining