

## Granulin/GRN/Progranulin Monoclonal Antibody

catalog number: **AN200186P**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

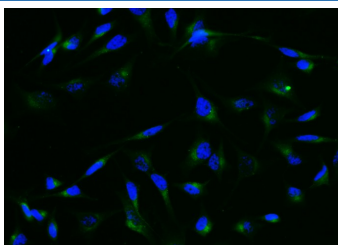
### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	Recombinant Human Granulin protein
<b>Host</b>	Mouse
<b>Isotype</b>	IgG1
<b>Clone</b>	10F6
<b>Purification</b>	Protein A
<b>Buffer</b>	0.2 µm filtered solution in PBS

### Applications Recommended Dilution

<b>ICC/IF</b>	1:20-1:100
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### Data



Immunofluorescence analysis of Human GRN in Hela cells. Cells were fixed with 4% PFA, blocked with 10% serum, and incubated with mouse anti-Human GRN monoclonal antibody (1:60). Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.

### Preparation & Storage

<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Shipping</b>	Ice bag

### Background

### For Research Use Only

Progranulin, also known as acrogranin, PC cell-derived growth factor (PCDGF) and epithelin/granulin precursor, is a ubiquitously expressed, 88 kDa, secreted glycoprotein. Structurally, it belongs to none of the well-established growth factor families. Mouse Progranulin is 589 amino acids (aa) in length and contains a 17 aa signal sequence and a 572 aa mature region that has four potential sites for N-linked glycosylation. It has a highly repetitive organization, containing seven tandem copies of a 55-57 aa consensus motif that contains 12 conserved cysteine residues: VxCx5-6Cx5CCx8CCx6CCxDx2HCCPxCx5-6Cx2. Progranulin is secreted in an intact form or undergoes proteolysis leading to the release of multiple peptides made from the seven tandem repeats, the granulins. Mouse Progranulin shares 87% and 75% aa sequence identity with rat and human Progranulin, respectively. Progranulin is involved in the regulation of cellular proliferation, as well as differentiation, development, and pathological processes. It has been isolated as a differentially expressed gene during mesothelial differentiation, macrophage development, development synovium of rheumatoid arthritis and osteoarthritis, sexual differentiation of the brain, and has also been shown to be a mediator of cartilage proliferation plus of wound response and tissue repair. High levels of Progranulin expression have been found to be associated with several human cancers, and are believed to contribute to tumorigenesis in breast cancer, clear cell renal carcinoma, invasive ovarian carcinoma, glioblastoma, adipocyte teratoma, and multiple myeloma.