



Recombinant Protein Technical Manual
Recombinant Mouse Granulin/GRN Protein (His Tag)
RPES2498

Product Data:

Product SKU: RPES2498

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_032201.2

Protein Information:

Molecular Mass: 63 kDa

AP Molecular Mass: 70-90 kDa

Tag: C-His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: epithelin;Pgrn

Immunogen Information:

Sequence: Met 1-Leu 589

Background:

Granulins are a family of secreted, glycosylated peptides that are cleaved from a single precursor protein with 7.5 repeats of a highly conserved 12-cysteine granulin/epithelin motif. The 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. 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. Granulin expression inhibited Tat transactivation, and tethering experiments showed that this effect was due, at least in part, to a direct action on cyclin T1 in the absence of Tat.