

Progranulin (Untagged), Human CellExp™, rat recombinant

CATALOG #:	4736-10	10 µg
	4736-50	50 µg
ALTERNATE NAMES:	Proepithelin, PEPI, PC Cell-derived Growth Factor.	
SOURCE:	HEK 293 cells	
SEQUENCE:	Signal peptide and rat progranulin (aa 1-602) is untagged. Reflects the native sequence with no additional amino acids.	
PURITY:	≥90% by SDS-PAGE	
MOL. WEIGHT:	~65.0 kDa (SDS-PAGE)	
FORMULATION:	Lyophilized from 0.2 µm-filtered solution in PBS, pH 7.2.	
RECONSTITUTION:	Reconstitute in distilled water	
ENDOTOXIN CONTENT:	<0.1 EU/µg purified protein	
STORAGE CONDITIONS:	Prepare aliquots after reconstitution and store at -20°C. Avoid repeated freeze thaw cycles.	

DESCRIPTION:

Progranulin (PGRN), also called proepithelin and PC cell-derived growth factor, is a single precursor protein of granulins which are a family of secreted, glycosylated peptides. It is a widely expressed pluripotent growth factor which plays a role in processes such as development, wound repair and inflammation by activating signaling cascades that control cell cycle progression and cell motility. Its function in the central nervous system is of interest, as mutations in the PGRN gene were found in cases of fronto-temporal degeneration (FTLD). In addition, PGRN has also been linked to tumorigenesis. Progranulin is a biomarker for FTLD, other types of Alzheimer's Disease (AD) and potentially for MCI (Mild Cognitive Impairment). Additionally, PGRN is described as a new ligand of TNF receptors and a potential therapeutic against inflammatory disease like arthritis.

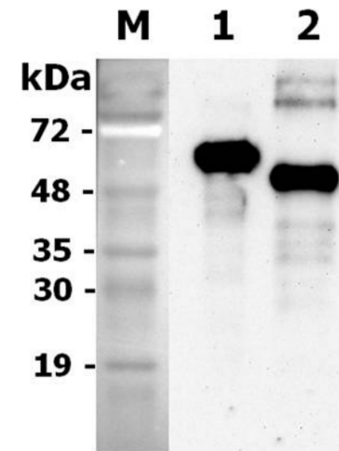


Figure 1: Deglycosylation of rat progranulin. To examine the deglycosylation of rat progranulin, 1 µg of rat progranulin is denatured with 1X glycoprotein denaturing buffer at 100°C for 10 minutes. After the addition of NP-40 and G7 reaction buffer, twofold dilutions of PNGase F are added and the reaction mix is incubated for 1 hour at 37°C. Separation of reaction products is visualized by immunoblotting using anti-progranulin (rat) antibody.

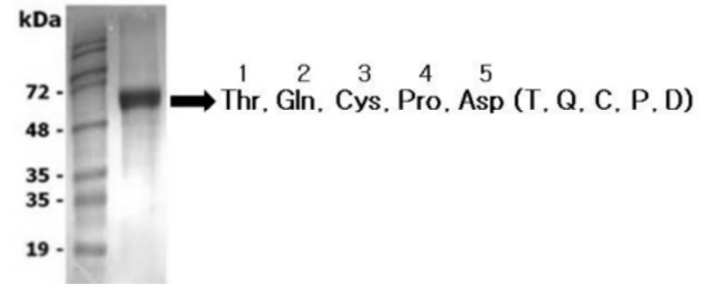


Figure 2: NH2-terminal sequence analysis.

RELATED PRODUCTS:

- Recombinant Mouse Progranulin (Cat. No. 4734-10, 100)
- Recombinant Human Progranulin (Cat. No. 4738-10, 100)
- Recombinant Rat Progranulin (Cat. No. 4735-10, 50)
- Recombinant mouse Progranulin (Untagged) (Cat. No. 4733-10, 50)
- Recombinant Human Progranulin (Untagged) (Cat. No. 4737-10, 50)

FOR RESEARCH USE ONLY! Not to be used on humans.