

**Synonym**

CLN11, GEP, GP88, PCDGF, PEPI, PGRN

**Source**

Human Progranulin Protein, His Tag(PGN-H52H3) is expressed from human 293 cells (HEK293). It contains AA Thr 18 - Leu 593 (Accession # [P28799-1](#) ).

Predicted N-terminus: Thr 18

**Molecular Characterization**

Progranulin(Thr 18 - Leu 593) P28799-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 63.7 kDa. The protein migrates as 80-95 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 0.01 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

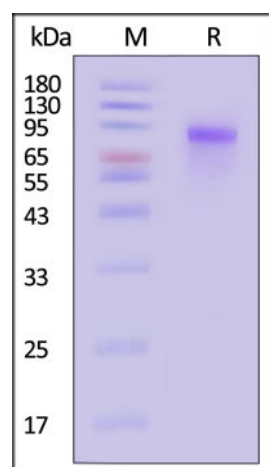
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

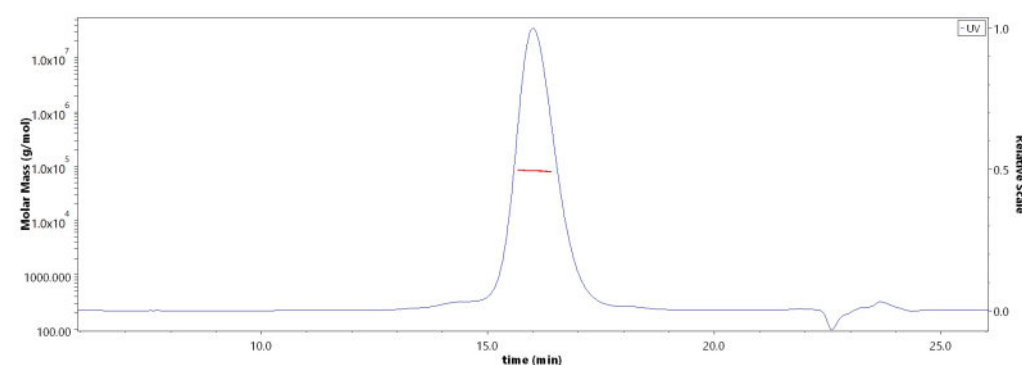
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

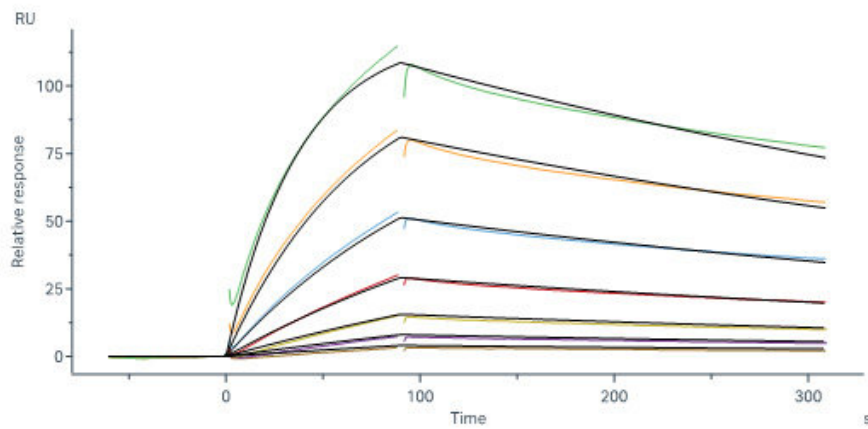
**SDS-PAGE**

Human Progranulin Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

**Bioactivity-SPR****SEC-MALS**

The purity of Human Progranulin Protein, His Tag (Cat. No. PGN-H52H3) is more than 90% and the molecular weight of this protein is around 75-95 kDa verified by SEC-MALS.

[Report](#)



Biotinylated Human Sortilin Protein, His,Avitag (Cat. No. SON-H82E9) captured on Biotin CAP-Series S Sensor Chip can bind Human Progranulin Protein, His Tag (Cat. No. PGN-H52H3) with an affinity constant of 0.355  $\mu$ M as determined in a SPR assay (Biacore 8K) (QC tested).

### Background

Progranulin, a secreted glycoprotein, is encoded in humans by the single GRN gene. Progranulin consists of seven and a half, tandemly repeated, non-identical copies of the 12 cysteine granulin motif. Many cellular processes and diseases are associated with this unique pleiotropic factor that include, but are not limited to, embryogenesis, tumorigenesis, inflammation, wound repair, neurodegeneration and lysosome function. Haploinsufficiency caused by autosomal dominant mutations within the GRN gene leads to frontotemporal lobar degeneration, a progressive neuronal atrophy that presents in patients as frontotemporal dementia.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.