

Product Name: KD-Validated Granulin Precursor Mouse Monoclonal Antibody**Catalog #: KVA00649**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 63.5kDa

Antigen Information

Gene Name	GRN GRN; Granulin Precursor; PCDGF; PGRN; Progranulin; CLN11; PC Cell-Derived Growth Factor;
Alternative Names	Glycoprotein Of 88 Kda; Glycoprotein 88; Proepithelin; Acrogranin; GP88; PEPI; Epithelin Precursor; Granulin-Epithelin; Epithelin; Granulins; GEP
Gene ID	2896.0
SwissProt ID	P28799
Immunogen	Recombinant protein of human GRN

Background

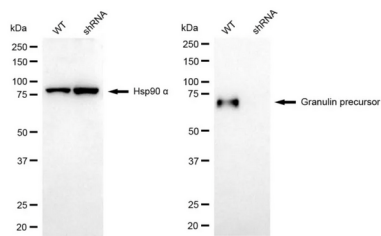
Granulins are a family of secreted, glycosylated peptides that are cleaved from a single precursor protein with 7.5 repeats of a highly conserved 12-cysteine granulin/epithelin motif. The 88 kDa precursor protein, progranulin, is also called proepithelin

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. [provided by RefSeq, Jul 2008]

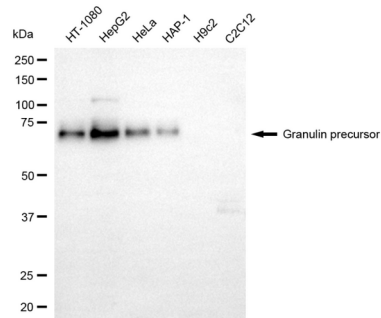
Research Area

Neuroscience, Immunology, Cancer

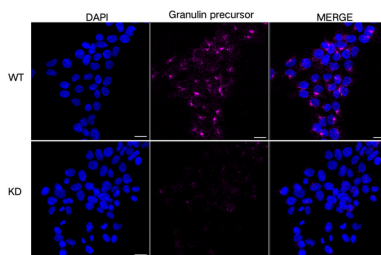
Image Data



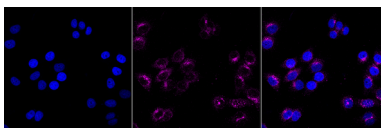
Western blotting analysis using granulin precursor antibody (KVA00649). Granulin precursor expression in wild type (WT) and granulin precursor (GRN) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with granulin precursor antibody (KVA00649, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



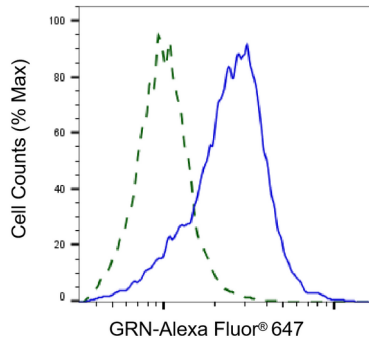
Western blotting analysis using granulin precursor antibody (KVA00649). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with granulin precursor antibody (KVA00649, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



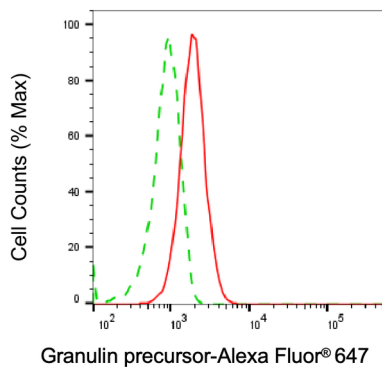
Immunocytochemical staining of HeLa cells using Granulin precursor antibody (KVA00649, 1:1,000), Top panel: wild-type (WT); Bottom panel: Granulin precursor shRNA knockdown (KD). Nuclei were stained blue with DAPI; Granulin precursor was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HepG2 cells with Granulin precursor antibody (KVA00649, 1:1,000). Nuclei were stained blue with DAPI; Granulin precursor was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: Low. Scale bar, 20 µm.



Validation of granulin precursor knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with granulin precursor antibody (KVA00649, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Granulin precursor expression in HepG2 cells using Granulin precursor antibody (KVA00649, 1:2,000). Green, isotype control; red, Granulin precursor.