

## Product datasheet

# Anti-Granulin antibody [EPR3781] ab108608

Recombinant RabMAb

4 References 4 Images

### Overview

<b>Product name</b>	Anti-Granulin antibody [EPR3781]
<b>Description</b>	Rabbit monoclonal [EPR3781] to Granulin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, WB, IP, IHC-P, ICC
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human Granulin aa 1-100. The exact sequence is proprietary.
<b>Positive control</b>	WB: A431, 293T, MCF7 and HeLa cell lysates and human fetal lung and fetal kidney tissue lysates. IHC-P: Human kidney tissue. ICC/IF: Malme-3M cells. Flow Cyt: A431 cells.
<b>General notes</b>	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMab<sup>®</sup> patents](#)

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

This product is a recombinant rabbit monoclonal antibody.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	PBS 49%, Sodium azide 0.01%, Glycerol 50%, BSA 0.05%
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3781
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab108608** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/200.
WB		1/1000 - 1/10000. Detects a band of approximately 55, 75 kDa (predicted molecular weight: 64 kDa).
IP		1/10 - 1/100.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC		1/100 - 1/250.

## Target

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### Function

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.

### Tissue specificity

In myelogenous leukemic cell lines of promonocytic, promyelocytic, and proerythroid lineage, in fibroblasts, and very strongly in epithelial cell lines. Present in inflammatory cells and bone marrow. Highest levels in kidney.

### Involvement in disease

Defects in GRN are the cause of ubiquitin-positive frontotemporal dementia (UP-FTD) [MIM:607485]; also known as tau-negative frontotemporal dementia linked to chromosome 17. Frontotemporal dementia (FTD) is the second most common cause of dementia in people under the age of 65 years. It is an autosomal dominant neurodegenerative disease.

### Sequence similarities

Belongs to the granulin family.

### Post-translational modifications

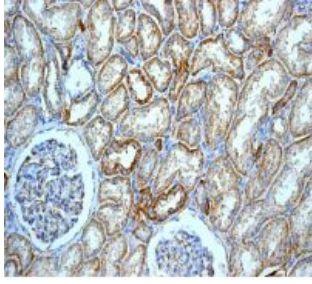
Granulins are disulfide bridged.

### Cellular localization

Secreted.

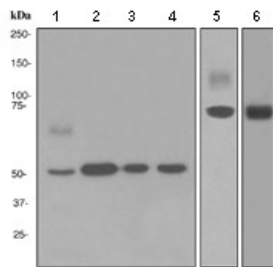
## Images

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granulin antibody [EPR3781] (ab108608)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue using ab108608 at 1/100.



Western blot - Anti-Granulin antibody [EPR3781] (ab108608)

**All lanes** : Anti-Granulin antibody [EPR3781] (ab108608) at 1/1000 dilution

**Lane 1** : A431 cell lysate

**Lane 2** : 293T cell lysate

**Lane 3** : MCF7 cell lysate

**Lane 4** : HeLa cell lysate

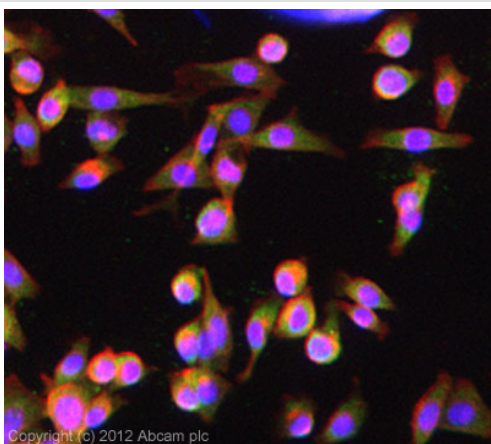
**Lane 5** : Human fetal lung tissue lysate

**Lane 6** : Human fetal kidney tissue lysate

Lysates/proteins at 10 µg per lane.

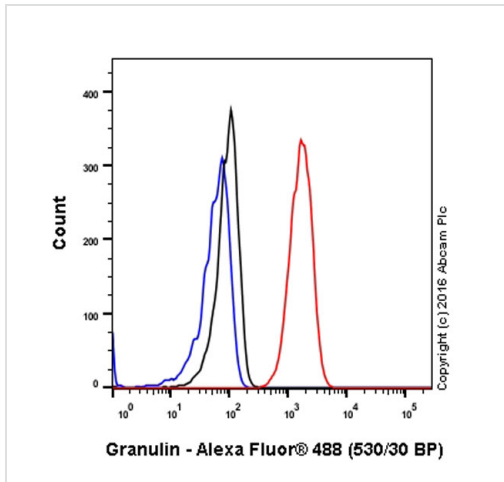
**Predicted band size:** 64 kDa

**Observed band size:** 55,75 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Granulin antibody [EPR3781] (ab108608)

ICC/IF image of ab108608 stained Malme-3M cells. The cells were 4% paraformaldehyde fixed (10 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab108608, 1/200 dilution) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Flow Cytometry - Anti-Granulin antibody [EPR3781]  
(ab108608)

Flow cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Granulin (red) with ab108608 at a 1/200 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (ab172730). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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