# abcam

### Product datasheet

# Anti-Granulin antibody [EPR15864] - BSA and Azide free ab271984





### 6 Images

#### Overview

**Product name** Anti-Granulin antibody [EPR15864] - BSA and Azide free

**Description** Rabbit monoclonal [EPR15864] to Granulin - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: WB, IP, IHC-P

Species reactivity Reacts with: Human

Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. **Immunogen** 

Positive control WB: A431 and 293T whole cell lysate; Human fetal kidney lysate; Human GRN full-length

recombinant protein with GST-tag at N-terminal IHC-P: Human liver, placenta, breast cancer and

gastric cancer tissues. IP: HeLa whole cell lysate.

**General notes** ab271984 is the carrier-free version of ab208777.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

1

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR15864

**Isotype** IgG

#### **Applications**

**The Abpromise guarantee** Our Abpromise guarantee covers the use of ab271984 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 64 kDa.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.

# Target

**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.

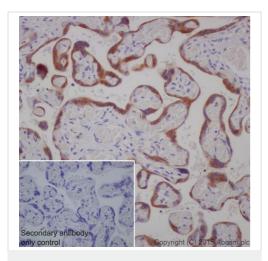
**Sequence similarities** Belongs to the granulin family.

Post-translational modifications

Granulins are disulfide bridged.

Cellular localization Secreted.

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granulin antibody

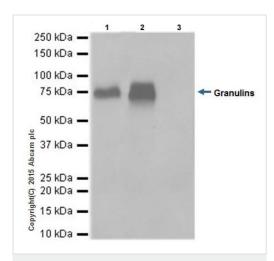
[EPR15864] - BSA and Azide free (ab271984)

Immunohistochemical analysis of paraffin-embedded Human placenta tissue labeling Granulin with ab208777 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on trophoblastic cells of Human placenta is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208777).



Immunoprecipitation - Anti-Granulin antibody
[EPR15864] - BSA and Azide free (ab271984)

Granulin was immunoprecipitated from 1mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab208777 at 1/70 dilution.

Western blot was performed from the immunoprecipitate using ab208777 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: HeLa whole cell lysate, 10µg (Input).

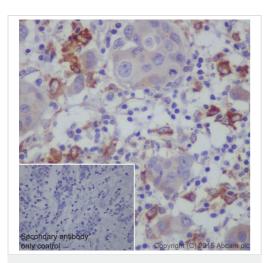
Lane 2: ab208777 IP in HeLa whole cell lysate.

Lane 3: Rabbit lgG,monoclonal -lsotype Control (ab172730) instead of ab208777 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208777).



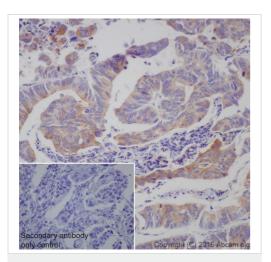
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granulin antibody
[EPR15864] - BSA and Azide free (ab271984)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissue labeling Granulin with ab208777 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on Human breast cancer is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208777).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granulin antibody

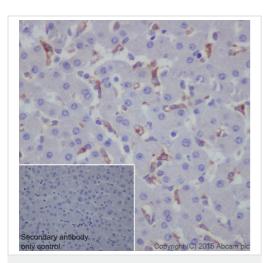
[EPR15864] - BSA and Azide free (ab271984)

Immunohistochemical analysis of paraffin-embedded Human gastric cancer tissue labeling Granulin with ab208777 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on Human gastric cancer is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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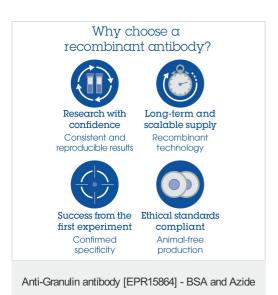
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granulin antibody
[EPR15864] - BSA and Azide free (ab271984)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling Granulin with ab208777 at 1/1000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on Kupffer cells of Human liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208777).



free (ab271984)

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