

Product datasheet

Anti-GSDMA antibody [EPR19858-17] ab214818

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [1 References](#) [7 Images](#)

Overview

Product name	Anti-GSDMA antibody [EPR19858-17]
Description	Rabbit monoclonal [EPR19858-17] to GSDMA
Host species	Rabbit
Specificity	This antibody also reacts with mouse GSDMA2 and GSDMA3. Based on our preliminary data, this antibody can't detect signal on mouse samples in WB.
Tested applications	Suitable for: IHC-Fr, WB, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Hela cells stably transfected with human or mouse GSDMA expression vector, containing a DDDDK-tag, whole cell lysate. Human stomach lysate. Human and rat skin lysate. IHC-Fr: Mouse stomach and breast skin tissue. IP: Hela cells stably transfected with human GSDMA expression vector, containing a DDDDK-tag, whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR19858-17
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab214818 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
IHC-Fr		1/50. We recommend to optimize primary antibody dilution depending on the tissue being tested.
WB		1/1000. Predicted molecular weight: 49 kDa. Based on our preliminary data, this antibody can't detect signal on mouse samples in WB.
IP	★★★★★ (1)	1/30.

Target

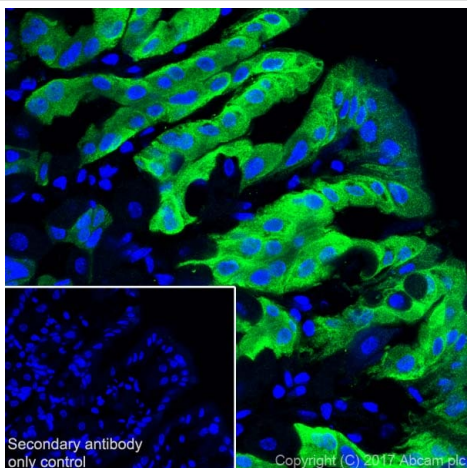
Relevance

Function: May promote pyroptosis (Probable). Upon cleavage in vitro of genetically engineered GSDMA, the released N-terminal moiety binds to some types of lipids, such as possibly phosphatidylinositol (4,5)-bisphosphate. Homooligomerizes within the membrane and forms pores of 10 -15 nanometers (nm) of inner diameter, triggering cell death. Also binds to bacterial and mitochondrial lipids, including cardiolipin, and exhibits bactericidal activity (PubMed:27281216). The physiological relevance of these observations is unknown. Tissue specificity: Expressed predominantly in the gastrointestinal tract and, at a lower level, in the skin. Also detected in mammary gland. In the gastrointestinal tract, mainly expressed in differentiated cells, including the differentiated cell layer of esophagus and mucus-secreting pit cells of the gastric epithelium. Down-regulated in gastric cancer cells. Similarity: Belongs to the gasdermin family. Domain: Intramolecular interactions between N- and C-terminal domains may be important for autoinhibition in the absence of activation signal. The intrinsic pyroptosis-inducing activity is carried by the N-terminal domain.

Cellular localization

Cytoplasm, perinuclear region

Images

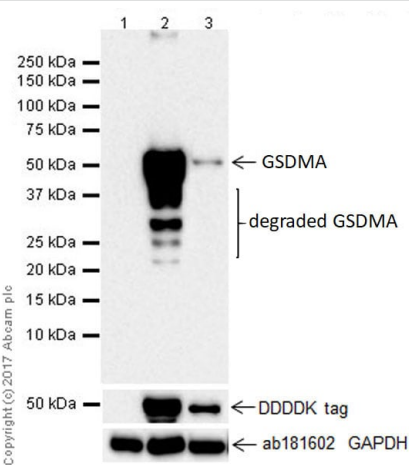


Immunohistochemistry (Frozen sections) - Anti-GSDMA antibody [EPR19858-17] (ab214818)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse stomach tissue labeling GSDMA with ab214818 at 1/300 dilution (green), followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at a 1/1000 dilution. Positive staining in cells localized in the differentiated region of stomach epithelia of mouse stomach tissue section (PMID: 17471240; 19051310) is observed. Counter stained with DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit used at a 1/1000 dilution.

Antigen retrieval is not needed.



Western blot - Anti-GSDMA antibody [EPR19858-17] (ab214818)

All lanes : Anti-GSDMA antibody [EPR19858-17] (ab214818) at 1/1000 dilution

Lane 1 : HeLa cells, whole cell lysate

Lane 2 : HeLa cells stably transfected with human GSDMA expression vector, containing a DDDDK-tag, whole cell lysate

Lane 3 : HeLa cells stably transfected with mouse GSDMA expression vector, containing a DDDDK-tag, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

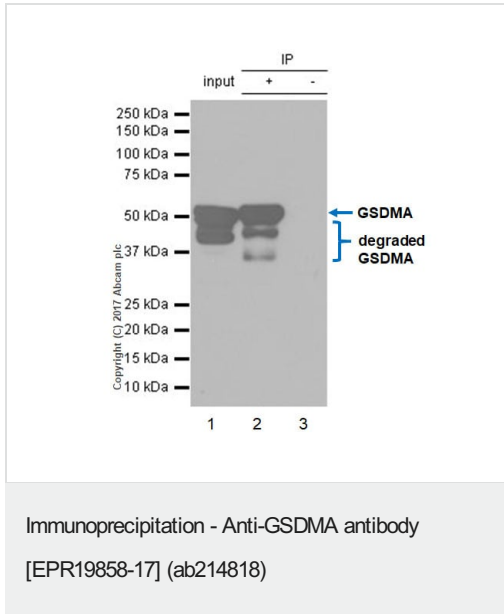
Predicted band size: 49 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5%NFDM/TBS.

The observed molecular mass is consistent with the literature (PMID:17350798).

The observed molecular masses lower than 50 kDa are degraded expressed GSDMA protein. The cells were kindly provided by our collaborator Dr. Feng Shao, NIBS.



GSDMA was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell) stably transfected with human GSDMA expression vector, containing a DDDDK-tag, whole cell lysate with ab214818 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab214818 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution

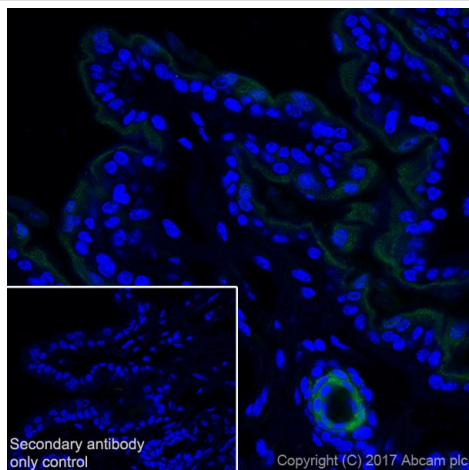
Lane 1: HeLa cells stably transfected with human GSDMA expression vector, containing a DDDDK-tag, whole cell lysate 10 μ g (Input).

Lane 2: **ab209847** IP in HeLa cells stably transfected with human GSDMA expression vector, containing a DDDDK-tag, whole cell lysate (+).

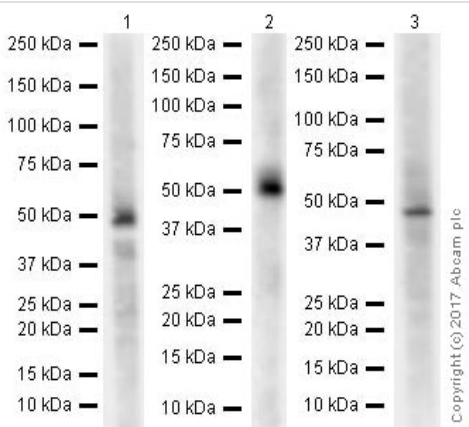
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab214818 in HeLa cells stably transfected with human GSDMA expression vector, containing a DDDDK-tag, whole cell lysate (-).
Blocking and dilution buffer and concentration: 5% NFDm/TBST.
Exposure time: Less than 1 second.

The observed molecular mass is consistent with the literature (PMID:17350798).

The observed molecular masses lower than 50 kDa are degraded expressed GSDMA protein. The cells were kindly provided by our collaborator Dr. Feng Shao, NIBS.



Immunohistochemistry (Frozen sections) - Anti-GSDMA antibody [EPR19858-17] (ab214818)



Western blot - Anti-GSDMA antibody [EPR19858-17] (ab214818)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse breast skin tissue labeling GSDMA with ab214818 at 1/50 dilution (green), followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary at a 1/1000 dilution. Positive staining in skin keratinocytes and hair follicle cells on mouse breast skin, negative staining in basal and stromal cells (PMID: 17471240; 19051310) is observed. Counter stained with DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab150077** AlexaFluor[®]488 Goat anti-Rabbit used at a 1/1000 dilution.

Antigen retrieval is not needed.

All lanes : Anti-GSDMA antibody [EPR19858-17] (ab214818) at 1/1000 dilution

Lane 1 : Human stomach lysate

Lane 2 : Human skin lysate

Lane 3 : Rat skin lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 49 kDa

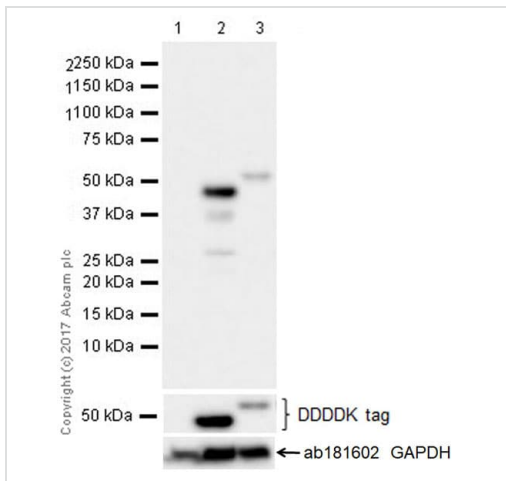
Blocking/Dilution buffer: 5%NFDM/TBST.

Exposure times:

Lanes 1/3: 102 seconds

Lane 2: 3 minutes

This image is produced using super sensitivity ECL substrate. We strongly suggest the customer to use higher sensitivity ECL substrate when developing the blot.



Western blot - Anti-GSDMA antibody [EPR19858-17] (ab214818)

All lanes : Anti-GSDMA antibody [EPR19858-17] (ab214818) at 1/1000 dilution

Lane 1 : HeLa whole cell lysate

Lane 2 : HeLa cells stably transfected with mouse GSDMA2 expression vector, containing a DDDDK-tag, whole cell lysate

Lane 3 : HeLa cells stably transfected with mouse GSDMA3 expression vector, containing a DDDDK-tag, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary





All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 49 kDa

Exposure time: 70 seconds

Blocking/Dilution buffer: 5% NFDN/TBST.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-GSDMA antibody [EPR19858-17] (ab214818)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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