

## Product datasheet

# Anti-GSDMD antibody [EPR19828] ab209845

KO VALIDATED Recombinant RabMAB

★★★★☆ 3 Abreviews 195 References 7 Images

### Overview

<b>Product name</b>	Anti-GSDMD antibody [EPR19828]
<b>Description</b>	Rabbit monoclonal [EPR19828] to GSDMD
<b>Host species</b>	Rabbit
<b>Specificity</b>	In our hands this product works well in western blot using mouse cell lines but not tissue samples. We recommend <a href="#">ab219800</a> as an alternative for low expression samples.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: RAW 264.7 cell line with ectopic expression of Apoptosis-associated speck-like protein, untreated and primed with 1 µg/mL lipopolysaccharides for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h, whole cell lysates; J774A.1. Mouse liver lysate IP: RAW 264.7-derived cells with ectopic expression of ASC, untreated and primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h, whole cell lysates.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAB <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR19828
<b>Isotype</b>	IgG

## Applications

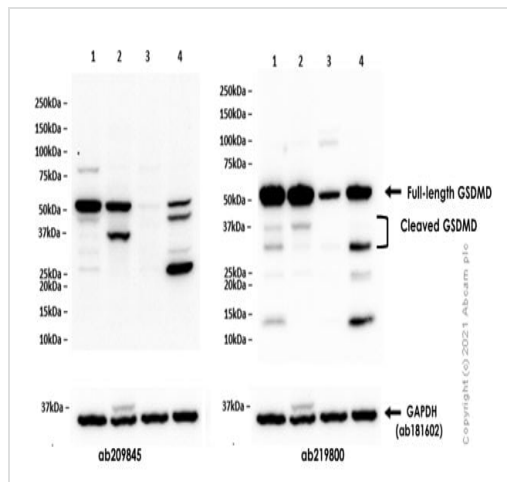
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab209845 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000. Detects a band of approximately 53, 32 kDa (predicted molecular weight: 53 kDa).
IP		1/30.

## Target

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

## Images



Western blot - Anti-GSDMD antibody [EPR19828] (ab209845)

**All lanes** : Anti-GSDMD antibody [EPR19828] (ab209845) at 1/1000 dilution (**ab219800**)

**Lane 1** : RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate, Batch 1

**Lane 2** : Mouse liver lysate

**Lane 3** : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

**Lane 4** : RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate, Batch 2

Lysates/proteins at 20 µg per lane.

### Secondary

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

**Predicted band size:** 53 kDa

**Observed band size:** 53 kDa

Blocking buffer and concentration: 5% NFDM/TBST

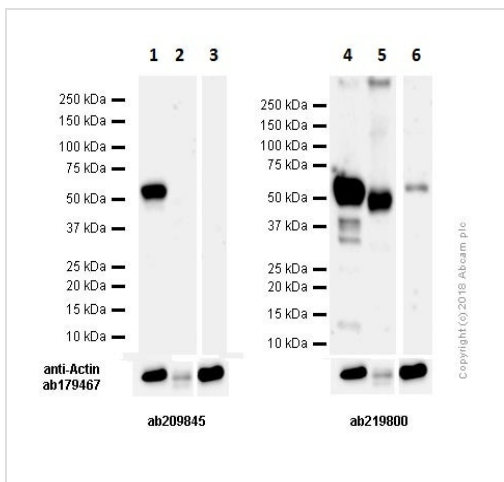
Diluting buffer and concentration: 5% NFDM/TBST

Exposure time: ab209845 - 120 seconds, **ab219800** - 20 seconds

Compared with ab209845, **ab219800** has a higher affinity in positive samples.

The MW observed is consistent with the literature: PMID 26375003.

The 43 kDa band is likely to be a GSDMD cleavage product by caspase-3 at GSDMD Asp88 (PMID: 30902848, PMID: 28392147, PMID: 30135078).



Western blot - Anti-GSDMD antibody [EPR19828]  
(ab209845)

**Lanes 1-3** : Anti-GSDMD antibody [EPR19828] (ab209845) at 1/1000 dilution

**Lanes 4-6** : Anti-GSDMD antibody [EPR20859] (**ab219800**) at 1/1000 dilution

**Lanes 1 & 4** : Raw264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysates

**Lanes 2 & 5** : Mouse liver tissue lysate

**Lanes 3 & 6** : Mouse spinal cord tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

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

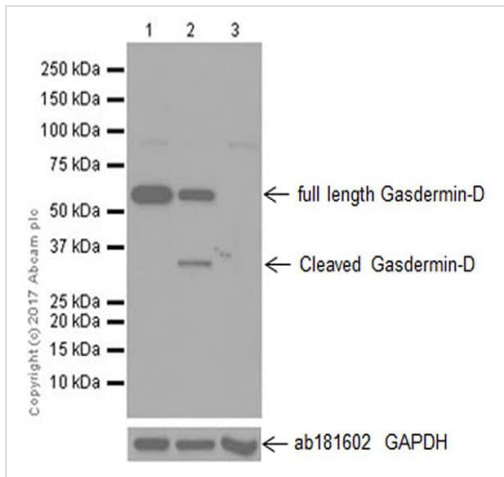
**Predicted band size:** 53 kDa

**Observed band size:** 53 kDa

**Exposure time:** 3 minutes

Blocking/Diluting buffer and concentration 5% NFDM/TBST.

Ab209845 work best with cell lysates.



Western blot - Anti-GSDMD antibody [EPR19828] (ab209845)

**All lanes** : Anti-GSDMD antibody [EPR19828] (ab209845) at 1/1000 dilution

**Lane 1** : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus)-derived cell line with ectopic expression of ASC (Apoptosis-associated speck-like protein), whole cell lysate

**Lane 2** : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus)-derived cell line with ectopic expression of ASC primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h, whole cell lysate

**Lane 3** : Gasdermin-D knockout RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus)-derived cell line with ectopic expression of ASC 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:** 53 kDa

**Observed band size:** 32,53 kDa

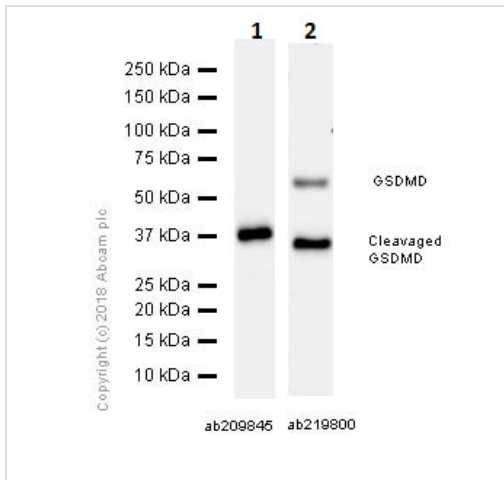
**Exposure time:** 1 minute

Blocking/Dilution buffer: 5% NFDN/TBST.

As a response to LPS stimulation and nigericin treatment, Gasdermin-D is cleaved and Gasdermin-D N-terminal form is detected at 32kDa. Details of RAW264.7-derived cells with ectopic expression of ASC are described in the literature: PMID 26611636

The MW observed is consistent with the literature: PMID 26375003.

The cells were kindly provided by our collaborator Dr. Jiahui Han, Xiamen University.



Western blot - Anti-GSDMD antibody [EPR19828] (ab209845)

**Lane 1** : Anti-GSDMD antibody [EPR19828] (ab209845) at 1/1000 dilution

**Lane 2** : Anti-GSDMD antibody [EPR20859] (**ab219800**) at 1/1000 dilution

**All lanes** : J774A.1 (Mouse reticulum cell sarcoma monocyte macrophage) whole cell lysates

Lysates/proteins at 20 µg per lane.

### Secondary

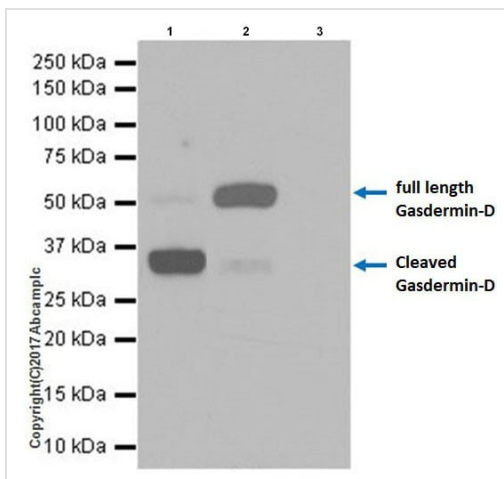
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 53 kDa

**Observed band size:** 53 kDa

**Exposure time:** 3 minutes

Diluting/Blocking buffer and concentration 5% NFDM/TBST



Immunoprecipitation - Anti-GSDMD antibody [EPR19828] (ab209845)

Gasdermin-D was immunoprecipitated from 0.35 mg of RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus)-derived cells with ectopic expression of ASC were primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h, whole cell lysate with ab209845 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab209845 at 1/1000 dilution.

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

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

Exposure time: 3 minutes.

As a response to LPS stimulation and nigericin treatment, Gasdermin-D is cleaved and Gasdermin-D N-terminal form is detected at 32kDa. Details of RAW 264.7-derived cells with ectopic expression of ASC are described in the literature: PMID 26611636.

The cells were kindly provided by our collaborator Dr. Jiahuai Han, Xiamen University.

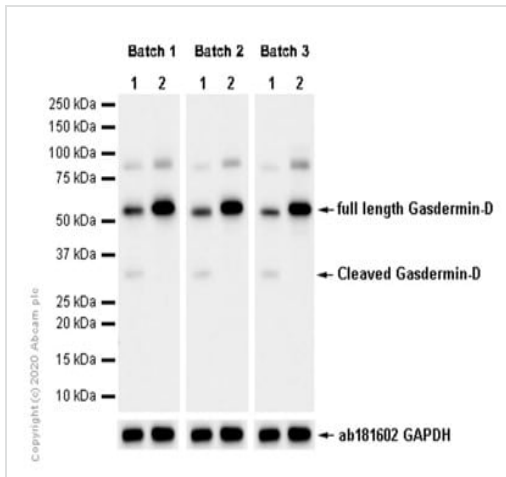
Note: The antibody has better affinity to full length Gasdermin-D.

**All lanes :**

**Lane 1 :** RAW 264.7-derived cells with ectopic expression of ASC were primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h at 10 µg

**Lane 2 :** ab209845 IP in RAW 264.7-derived cells with ectopic expression of ASC were primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h whole cell lysate at 10 µg

**Lane 3 :** Rabbit monoclonal IgG (**ab172730**) instead of ab209845 in RAW 264.7-derived cells with ectopic expression of ASC were primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h whole cell lysate



Western blot - Anti-GSDMD antibody [EPR19828] (ab209845)

Different batches of ab209845 were tested on:

1: RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) -derived cell line with ectopic expression of ASC primed with 1 µg/mL lipopolysaccharides (LPS) for 4 h followed by 10 µM nigericin treatment under serum starved conditions for 2 h, whole cell lysate at 5.2 µg/ml.

2: RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) -derived cell line with ectopic expression of ASC (Apoptosis-associated speck-like protein), whole cell lysate at 5.2 µg/ml.

15 µg of lysate was loaded in each lane. Bands observed at 32,53 kDa.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-GSDMD antibody [EPR19828] (ab209845)

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

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