

## ARG43428 anti-GSDMD antibody [6D11]

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [6D11] recognizes GSDMD
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	6D11
Isotype	IgG2b
Target Name	GSDMD
Species	Human
Immunogen	Recombinant protein corresponding to M1-H484 of Human GSDMD.
Conjugation	Un-conjugated
Alternate Names	FKSG10; DF5L; Gasdermin domain-containing protein 1; Gasdermin-D; DFNA5L; GSDMDC1

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 53 kDa	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

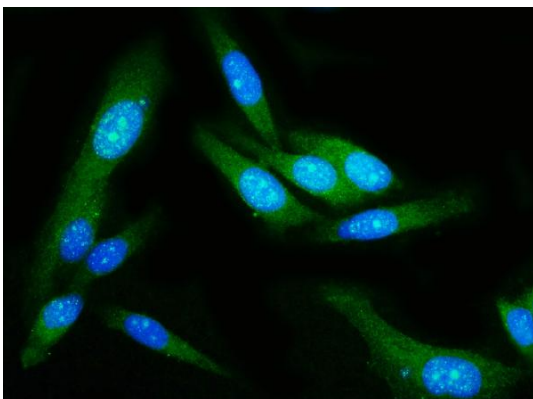
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

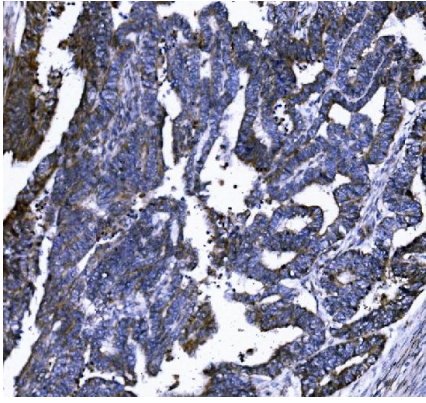
Gene Symbol	GSDMD
Gene Full Name	gasdermin D
Background	Gasdermin D is a member of the gasdermin family. Members of this family appear to play a role in regulation of epithelial proliferation. Gasdermin D has been suggested to act as a tumor suppressor. Alternatively spliced transcript variants have been described. [provided by RefSeq, Oct 2009]
Function	[Gasdermin-D, N-terminal]: Promotes pyroptosis in response to microbial infection and danger signals. Produced by the cleavage of gasdermin-D by inflammatory caspases CASP1 or CASP4 in response to canonical, as well as non-canonical (such as cytosolic LPS) inflammasome activators (PubMed:26375003, PubMed:26375259, PubMed:27418190). After cleavage, moves to the plasma membrane where it strongly binds to inner leaflet lipids, including monophosphorylated phosphatidylinositols, such as phosphatidylinositol 4-phosphate, bisphosphorylated phosphatidylinositols, such as phosphatidylinositol (4,5)-bisphosphate, as well as phosphatidylinositol (3,4,5)-bisphosphate, and more weakly to phosphatidic acid and phosphatidylserine (PubMed:27281216). Homooligomerizes within the membrane and forms pores of 10 - 15 nanometers (nm) of inner diameter, possibly allowing the release of mature IL1B and triggering pyroptosis (PubMed:27418190, PubMed:27281216). Exhibits bactericidal activity. Gasdermin-D, N-terminal released from pyroptotic cells into the extracellular milieu rapidly binds to and kills both Gram-negative and Gram-positive bacteria, without harming neighboring mammalian cells, as it does not disrupt the plasma membrane from the outside due to lipid-binding specificity (PubMed:27281216). Under cell culture conditions, also active against intracellular bacteria, such as <i>Listeria monocytogenes</i> (By similarity). Strongly binds to bacterial and mitochondrial lipids, including cardiolipin. Does not bind to unphosphorylated phosphatidylinositol, phosphatidylethanolamine nor phosphatidylcholine (PubMed:27281216). [UniProt]
Calculated Mw	53 kDa
PTM	Cleavage at Asp-275 by CASP1 (mature and uncleaved precursor forms) or CASP4 relieves autoinhibition and is sufficient to initiate pyroptosis. [UniProt]
Cellular Localization	Gasdermin-D: Cytoplasm, cytosol. Inflammasome. Note=In response to a canonical inflammasome stimulus, such as nigericin, recruited to NLRP3 inflammasome with similar kinetics to that of uncleaved CASP1 precursor. Gasdermin-D, N-terminal: Cell membrane. Secreted. Note=Released in the extracellular milieu following pyroptosis. [UniProt]

## Images



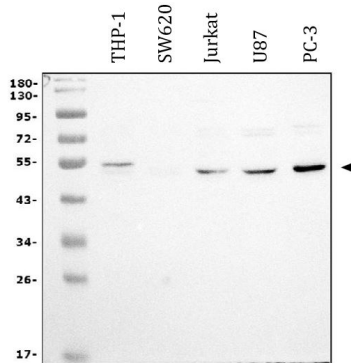
ARG43428 anti-GSDMD antibody [6D11] ICC/IF image

Immunofluorescence: PC-3 cells were blocked with 10% goat serum and then stained with ARG43428 anti-GSDMD antibody [6D11] (green) at 5 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



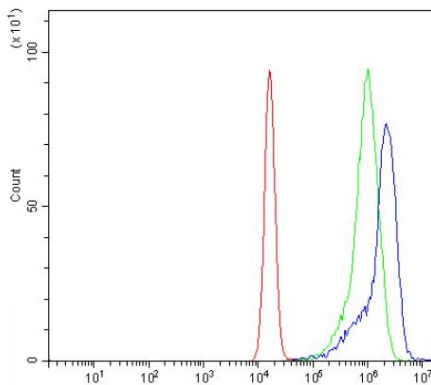
ARG43428 anti-GSDMD antibody [6D11] IHC-P image

Immunohistochemistry: Paraffin-embedded Human cervical cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG43428 anti-GSDMD antibody [6D11] at 2 µg/ml dilution, overnight at 4°C.



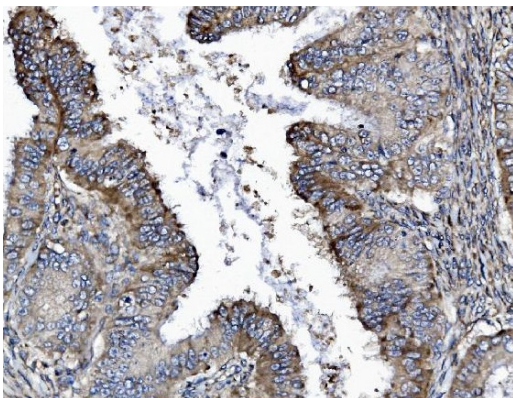
ARG43428 anti-GSDMD antibody [6D11] WB image

Western blot: 30 µg of sample under reducing conditions. THP-1, SW620, Jurkat, U87 and PC-3 whole cell lysates stained with ARG43428 anti-GSDMD antibody [6D11] at 0.5 µg/ml dilution, overnight at 4°C.



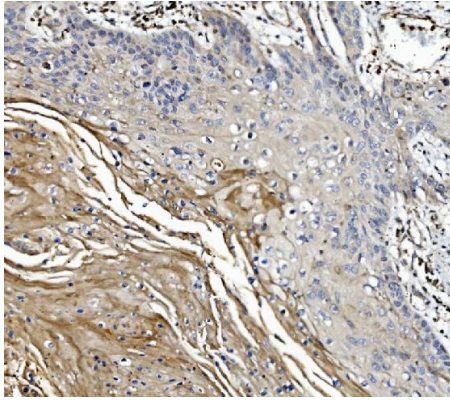
ARG43428 anti-GSDMD antibody [6D11] FACS image

Flow Cytometry: Jurkat cells were blocked with 10% normal goat serum and then stained with ARG43428 anti-GSDMD antibody [6D11] (blue) at 1 µg/10<sup>6</sup> cells for 30 min at 20°C, followed by incubation with DyLight<sup>®</sup>488 labelled secondary antibody. Isotype control antibody (green) was mouse IgG (1 µg/10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (Red) was also used as a control.



ARG43428 anti-GSDMD antibody [6D11] IHC-P image

Immunohistochemistry: Paraffin-embedded Human cervical intraepithelial neoplasia tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG43428 anti-GSDMD antibody [6D11] at 2 µg/ml dilution, overnight at 4°C.



#### ARG43428 anti-GSDMD antibody [6D11] IHC-P image

Immunohistochemistry: Paraffin-embedded Human esophageal squamous carcinoma tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG43428 anti-GSDMD antibody [6D11] at 2 µg/ml dilution, overnight at 4°C.