

# Gasdermin D Rabbit mAb [K8AF]

Cat NO. :A75864

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB	н	P57764	53, 43, 30, 21	Rabbit	IgG	100ul,200ul
			kDa			

Applications detail:

Application

WB

1:1000-2000

The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

**Purification**:

Protein A purification

## Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of Human Gasdermin D

## Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

### Tissue specificity:

Expressed in the suprabasal cells of esophagus, as well as in the isthmus/neck, pit, and gland of the stomach, suggesting preferential expression in differentiating cells..

## Subcellular location:

[Gasdermin-D]: Cytoplasm, cytosol. Inflammasome.

### Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

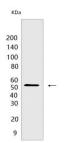
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



[Gasdermin-D]: Precursor of a pore-forming protein that plays a key role in host defense against pathogen infection and danger signals (PubMed:26375003, PubMed:26375259, PubMed:27281216). This form constitutes the precursor of the pore-forming protein: upon cleavage, the released N-terminal moiety (Gasdermin-D, Nterminal) binds to membranes and forms pores, triggering pyroptosis (PubMed:26375003, PubMed:26375259, PubMed:27281216).., [Gasdermin-D, N-terminal]: Promotes pyroptosis in response to microbial infection and danger signals (PubMed:26375003, PubMed:26375259, PubMed:27418190, PubMed:28392147, PubMed:32820063). Produced by the cleavage of gasdermin-D by inflammatory caspases CASP1, CASP4 or CASP5 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, PubMed:29898893). Homooligomerizes within the membrane and forms pores of 10-15 nanometers (nm) of inner diameter, allowing the release of mature interleukin-1 (IL1B and IL18) and triggering pyroptosis (PubMed:27418190, PubMed:27281216, PubMed:29898893, PubMed:33883744). Exhibits bactericidal activity (PubMed:27281216). 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 lipidbinding specificity (PubMed: 27281216). Under cell culture conditions, also active against intracellular bacteria, such as Listeria monocytogenes (By similarity). Also active in response to MAP3K7/TAK1 inactivation by Yersinia toxin YopJ, which triggers cleavage by CASP8 and subsequent activation (By similarity). Strongly binds to bacterial and mitochondrial lipids, including cardiolipin (PubMed:27281216). Does not bind to unphosphorylated phosphatidylinositol, phosphatidylethanolamine nor phosphatidylcholine (PubMed:27281216)...

#### Validation Data:

#### Gasdermin D Rabbit mAb [K8AF] Images



Western blot (SDS PAGE) analysis of extracts from PC-3 cells. Using Gasdermin D Rabbit mAb [K8AF] at dilution of 1:1000 incubated at  $4^{\circ}$ C over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.