

GSDMD (4013) Rabbit Monoclonal Antibody

GSDMD (4013) Rabbit Monoclonal Antibody Catalog # AP93712

Product Information

Application WB, IHC, FC, IP
Primary Accession Q9D8T2
Reactivity Rat, Mouse
Clonality Monoclonal
Calculated MW 53238

Additional Information

Gene ID 69146

Other Names Gasdermin-D, Gasdermin domain-containing protein 1, Gasdermin-D,

N-terminal, GSDMD-NT, mGSDMD-NTD, p30, Gasdermin-D, C-terminal, GSDMD-CT, mGSDMD-CTD, p20, Gasdermin-D, p13, Gasdermin-D, 13 kDa, 13 kDa GSDMD, Gasdermin-D, p40, Gsdmd {ECO:0000303|PubMed:26611636,

ECO:0000312 | MGI:MGI:1916396}

Dilution WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 IP~~N/A

Storage Conditions -20°C

Protein Information

Name Gsdmd {ECO:0000303 | PubMed:26611636, ECO:0000312 | MGI:MGI:1916396}

Function [Gasdermin-D]: Precursor of a pore-forming protein that plays a key role in

host defense against pathogen infection and danger signals

(PubMed: <u>26375003</u>, PubMed: <u>26375259</u>, PubMed: <u>26611636</u>,

PubMed: <u>27383986</u>, PubMed: <u>27385778</u>, PubMed: <u>27418190</u>). This form constitutes the precursor of the pore-forming protein: upon cleavage, the released N-terminal moiety (Gasdermin-D, N-terminal) binds to membranes

and forms pores, triggering pyroptosis (PubMed:26375003, PubMed:26375259, PubMed:26611636, PubMed:27383986,

PubMed: 27385778, PubMed: 27418190).

Cellular Location [Gasdermin-D]: Cytoplasm, cytosol Inflammasome. Note=In response to a

canonical inflammasome stimulus, such as nigericin, recruited to NLRP3 inflammasone with similar kinetics to that of uncleaved CASP1 precursor. [Gasdermin-D, N-terminal]: Cytoplasm, cytosol. Note=(Microbial infection) Upon infection by M.tuberculosis, localization to cell membrane is prevented by M.tuberculosis phosphatase PtpB that catalyzes dephosphorylation of phosphatidylinositol (4,5)-bisphosphate and phosphatidylinositol 4-

phosphate, thereby inhibiting the membrane targeting of Gasdermin-D, N-

terminal and subsequent cytokine release and pyroptosis [Gasdermin-D, C-terminal]: Cytoplasm, cytosol

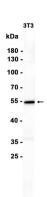
Tissue Location

Highly expressed in brain endothelial cells.

Background

Enables phospholipid binding activity and wide pore channel activity. Involved in several processes, including defense response to bacterium; positive regulation of interleukin-1 beta production; and protein-containing complex assembly. Acts upstream of or within cellular response to extracellular stimulus. Located in cytosol; extracellular space; and plasma membrane. Part of NLRP3 inflammasome complex. Is expressed in several structures, including gut; liver; lung; metanephros; and spleen. Orthologous to human GSDMD (gasdermin D). [provided by Alliance of Genome Resources, Apr 2022]

Images



Western blot analysis of extracts from 3T3 cells using AP93712 at 1:1000.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.