Product Name: GSDMD Rabbit Monoclonal Antibody

Catalog #: AMRe03774



Summary

Production Name GSDMD Rabbit Monoclonal Antibody

Description Rabbit Monoclonal antibody

Host Rabbit
Application WB
Reactivity Human

Performance

ConjugationUnconjugatedModificationUnmodified

Isotype IgG

Clonality Monoclonal Form Liquid

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05%

protective protein

Purification Affinity Purification

Immunogen

Buffer

Gene Name GSDMD

Alternative Names DF5L; DFNA5L; FKSG10; GSDMDC1

Gene ID 79792 **SwissProt ID** P57764.

Application

Dilution Ratio WB: 1:500-1:1000

Molecular Weight Calculated MW: 53 kDa; Observed MW: 53 kDa

Background

Gasdermin-D, N-terminal: Promotes pyroptosis in response to microbial infection and danger signals. Produced by the

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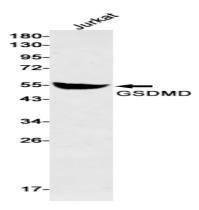


cleavage of gasdermin-D by inflammatory caspases CASP1 or CASP4 in response to canonical, as well as non-canonical (such as cytosolic LPS) inflammasome activators (PubMed:26375003, PubMed:26375259, PubMed:27418190). After cleavage, moves to the plasma membrane where it strongly binds to inner leaflet 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 Listeria monocytogenes. Strongly binds to bacterial and mitochondrial lipids, including cardiolipin. Does not bind to unphosphorylated phosphatidylinositol, phosphatidylethanolamine nor phosphatidylcholine (PubMed:27281216).

Research Area

Cell Biology

Image Data



Western blot analysis of GSDMD in Jurkat lysates using GSDMD antibody.

Note

For research use only.