

Product datasheet for MR207809L3V

OriGene Technologies, Inc.

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Gsdmd (NM_026960) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Gsdmd (NM_026960) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Gsdmd

Synonyms: 1810036L03Rik; AW558049; DF5L; Dfna5l; Gsdmdc1; M2-4

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM_026960

ORF Size: 1464 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR207809).

Sequence:

OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 026960.1</u>

 RefSeq Size:
 1776 bp

 RefSeq ORF:
 1464 bp

 Locus ID:
 69146

 UniProt ID:
 Q9D8T2

Cytogenetics: 15 D3





Gene Summary:

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:26611636, PubMed:26375259, PubMed:26375003, PubMed:27418190, PubMed:27385778, PubMed:27383986). After cleavage, moves to the plasma membrane where it strongly binds to membrane 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)-trisphosphate, and more weakly to phosphatidic acid and phosphatidylserine. Homooligomerizes within the membrane and forms pores of 10 - 15 nanometers (nm) of inner diameter, allowing the release of mature IL1B and triggering pyroptosis. Exhibits bactericidal activity. Gasdermin-D, N-terminal released from pyroptotic cells into the extracellular milieu rapidly binds to and kills both Gram-negative and Grampositive bacteria, without harming neighboring mammalian cells, as it does not disrupt the plasma membrane from the outside due to lipid-binding specificity. 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 phosphatidylethanolamine or phosphatidylcholine (PubMed:27383986).[UniProtKB/Swiss-Prot Function]