

Datasheet for ABIN7557576

Gasdermin A3 Protein (GSDMA3) (AA 1-464) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Gasdermin A3 (GSDMA3)
Protein Characteristics:	AA 1-464
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Gasdermin A3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Gsdma3 Protein expressed in mammalien cells.
Sequence:	MPVFEDVTRA LVRELNPRGD LTPLDLIDF KHFRPFCLVL RKRKSTLFWG ARYVRTDYTL LDLLEPGSSP SDLTDSGNFS FKNMLDVQVQ GLVEVPKTVK VKGTAGLSQS STLEVQTL SV APSALENLKK ERKLSADHSF LNEMRYHEKN LYVVMEAVEA KQEVTV EQTG NANAIFSLPS LALLGLQGSL NNNKAVTIPK GCVLAYRVRL LRVFLFNLWD IPYICNDSMQ TFPKIRRVPC SAFISPTQMI SEEP EEEKLI GEMHEDFKTL KEEVQRETQE VEKLSVGRS SLLTSLSHLL GKKKELQDLE QKLEGALDKG QKVTLEALPK DVLLSKDAMD AILYFLGALT ELTEEQLKIL VKSLEKKILP VQLKLVESTL EQNFLQDKEG VFPLQPDLLS SLGEEELTLT EALVGLSGLE VQRSGPQYAW DPDTRHNLCA LYAGLSLLHL LSRKSNALTY CALS Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Product Details

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

Gasdermin A3 (GSDMA3)

Alternative Name:

Gsdma3

Background:

Gasdermin-A3 (Gasdermin-3) [Cleaved into: Gasdermin-A3, N-terminal (GSDMA3-NT), Gasdermin-A3, C-terminal (GSDMA3-CT)],FUNCTION: [Gasdermin-A3]: Precursor of a pore-forming protein involved in the transition from catagen to telogen at the end of hair follicle morphogenesis (PubMed:15475261, PubMed:26375003, PubMed:27281216). This form constitutes the precursor of the pore: upon cleavage, the released N-terminal moiety (Gasdermin-A3, N-terminal) binds to membranes and forms pores, triggering pyroptosis (PubMed:26375003, PubMed:27281216, PubMed:35545613). This form acts as a sensor of infection: activation is triggered by cleavage by some bacterial effector protein, which releases the N-terminal moiety (Gasdermin-A3, N-terminal) (By similarity).

{ECO:0000250|UniProtKB:Q9EST1, ECO:0000269|PubMed:15475261,

ECO:0000269|PubMed:26375003, ECO:0000269|PubMed:27281216,

ECO:0000269|PubMed:35545613}., FUNCTION: [Gasdermin-A3, N-terminal]: Pore-forming protein that causes membrane permeabilization and pyroptosis (PubMed:26375003,

Target Details

PubMed:27281216, PubMed:35545613). Released upon cleavage by some bacterial effector protein, and binds to membrane inner leaflet lipids (By similarity). 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:27281216, PubMed:33883744, PubMed:35545613). Binds to membrane inner leaflet lipids, including bisphosphorylated phosphatidylinositols, such as phosphatidylinositol (4,5)-bisphosphate, as well as phosphatidylinositol (3,4,5)-bisphosphate, and more weakly to monophosphorylated phosphatidylinositols (PubMed:27281216). Also binds to bacterial and mitochondrial lipids, including cardiolipin, and exhibits bactericidal activity (PubMed:27281216, PubMed:29695864). Plays a role in the transition from catagen to telogen at the end of hair follicle morphogenesis, possibly by regulating hair follicle stem cell niche maintenance (PubMed:15475261, PubMed:15737203, PubMed:17572385, PubMed:22155111, PubMed:32302611). Also required for mammary gland development (PubMed:28168650). {ECO:0000250|UniProtKB:Q9EST1, ECO:0000269|PubMed:15475261, ECO:0000269|PubMed:15737203, ECO:0000269|PubMed:17572385, ECO:0000269|PubMed:22155111, ECO:0000269|PubMed:26375003, ECO:0000269|PubMed:27281216, ECO:0000269|PubMed:28168650, ECO:0000269|PubMed:29695864, ECO:0000269|PubMed:32302611, ECO:0000269|PubMed:33883744, ECO:0000269|PubMed:35545613}.

Molecular Weight: 52.0 kDa

UniProt: [Q5Y4Y6](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Handling

Storage Comment: Store at -80°C.

Expiry Date: 12 months