Datasheet for ABIN7548132

Gasdermin A Protein (GSDMA) (AA 1-445) (His tag)

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Overview

Quantity:	1 mg
Target:	Gasdermin A (GSDMA)
Protein Characteristics:	AA 1-445
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Gasdermin A protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat GSDMA Protein expressed in mammalien cells.
Sequence:	MTMFENVTRA LARQLNPRGD LTPLDSLIDF KRFHPFCLVL RKRKSTLFWG ARYVRTDYTL LDVLEPGSSP SDPTDTGNFG FKNMLDTRVE GDVDVPKTVK VKGTAGLSQN STLEVQTLSV APKALETVQE RKLAADHPFL KEMQDQGENL YVVMEVVETV QEVTLERAGK AEACFSLPFF APLGLQGSIN HKEAVTIPKG CVLAFRVRQL MVKGKDEWDI PHICNDNMQT FPPGEKSGEE KVILIQASDV GDVHEGFRTL KEEVQRETQQ VEKLSRVGQS SLLSSLSKLL GKKKELQDLE LALEGALDKG HEVTLEALPK DVLLSKEAVG AILYFVGALT ELSEAQQKLL VKSMEKKILP VQLKLVESTM EQNFLLDKEG VFPLQPELLS SLGDEELTLT EALVGLSGLE VQRSGPQYMW DPDTLPRLCA LYAGLSLLQQ LTKAS **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.**
Characteristics:	Key Benefits:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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 A (GSDMA)
Alternative Name:	GSDMA (GSDMA Products)
Background:	Gasdermin-A (Gasdermin-1) [Cleaved into: Gasdermin-A, N-terminal (GSDMA-NT), Gasdermin-A, C-terminal (GSDMA-CT)],FUNCTION: [Gasdermin-A]: This form constitutes the precursor of the pore-forming protein and acts as a sensor of infection: upon infection by S.pyogenes, specifically cleaved by S.pyogenes effector protein SpeB in epithelial cells, releasing the N-terminal moiety (Gasdermin-A, N-terminal) that binds to membranes and forms pores, triggering pyroptosis. {ECO:0000269|PubMed:27281216, ECO:0000269|PubMed:35110732, ECO:0000269|PubMed:35545676}., FUNCTION: [Gasdermin-A, N-terminal]: Pore-forming protein that causes membrane permeabilization and pyroptosis (PubMed:17471240, PubMed:27281216, PubMed:35110732, PubMed:35545676). Released upon cleavage by S.pyogenes effector protein SpeB, and binds to membrane inner leaflet lipids (PubMed:27281216, PubMed:35110732, PubMed:35545676). Homooligomerizes within the membrane and forms pores of 10-15 nanometers (nm) of inner diameter, triggering pyroptosis (PubMed:27281216, PubMed:35110732, PubMed:35545676). Pyroptosis triggers the elimination of the infected skin cell, depriving the pathogen of its protective niche, while

Target Details

	inducing an inflammatory response (PubMed:35110732, PubMed:35545676). This ultimately prevents bacterial penetration of the epithelial barrier and a subsequent systemic dissemination of the pathogen (PubMed:35110732, PubMed:35545676). Binds to cardiolipin and other acidic phospholipids, such as phosphatidylserine, which mediate its targeting to the inner leaflet membrane (PubMed:27281216, PubMed:35110732). {ECO:0000269|PubMed:17471240, ECO:0000269|PubMed:27281216, ECO:0000269|PubMed:35110732, ECO:0000269|PubMed:35545676}.
Molecular Weight:	49.4 kDa
UniProt:	Q96QA5

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
Storage Comment:	Store at -80°C.
Expiry Date:	12 months