

Datasheet for ABIN3136684
IFIH1 Protein (AA 1-1025) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	IFIH1
Protein Characteristics:	AA 1-1025
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IFIH1 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	MSIVCSAEDS FRNLILFFRP RLKMYIQVEP VLDHLIFLSA ETKEQILKKI NTCGNTSAAE LLLSTLEQGQ WPLGWTQMFV EALEHSGNPL AARYVKPTLT DLPSPSSETA HDECLHLLTL LQPTLVDKLL INDVLDTCFE KGLLTVEDRN RISAAGNSGN ESGVRELLRR IVQKENWFS FLDVLRQTGN DALFQELTGG GCPEDNTDLA NSSHRDGPAA NECLLPVDE SSLETEAWN DDILPEASCT DSSVTTESDT SLAEGSVSCF DESLGHNSNM GRDSGTMGSD SDESVIQTKR VSPEPELQLR PYQMEVAQPA LDGKNIICL PTGSGKTRVA VYITKDHLDK KQQASESGKV IVLVNKVMLA EQLFRKEFNP YLKKWYRIIG LSGDTQLKIS FPEVVKSYDV IISTAQILEN SLLNLESGDD DGVQLSDFSL IIIDECHHTN KEAVYNNIMR RYLKQKLRNN DLKKQNKPAI PLPQILGLTA SPGVGAACKQ SEAEKHILNI CANLDAFTIK TVKENLGQLK HQIKEPCKKF VIADDTREN P FKEKLLEIMA SIQTYCQKSP MSDFGTQHYE QWAIQMEKKA AKDGNRKDRV CAEHLRKYNE ALQINDTIRM IDAYSHLET F YTDEKEKKFA VLNDSKSDS EASSCNDQLK GDVKKSLKLD ETDEFLMNLF FDNKKMLKKL AENPKYENEK LIKL RNTILE QFTRSEESSR
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GIIFTKTRQS TYALSQWIME NAKFAEVGVK AHHLIGAGHS SEVKPMTQTE QKEVSKFRT
GEINLLIATT VAEGLDIKE CNIVIRYGLV TNEIAMVQAR GRARADESTY VLVTSSTSGSV
TEREIVNDFR EKMMYKAINR VQNMKPEEYA HKILELQVQS ILEKKMKVKR SIAKQYNDNP
SLITLLCKNC SMLVCSGENI HVIEKMHHVN MTPEFKGLYI VRENKALQKK FADYQTNGEI
ICKCGQAWGT MMVHKGLDLP CLKIRNFVVN FKNNSPKKQY KKWVELPIRF PDLDYSEYCL
YSDED

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Ifih1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	IFIH1
Alternative Name:	Ifih1 (IFIH1 Products)
Background:	<p>Innate immune receptor which acts as a cytoplasmic sensor of viral nucleic acids and plays a major role in sensing viral infection and in the activation of a cascade of antiviral responses including the induction of type I interferons and proinflammatory cytokines. Its ligands include mRNA lacking 2'-O-methylation at their 5' cap and long-dsRNA (>1 kb in length). Upon ligand binding it associates with mitochondria antiviral signaling protein (MAVS/IPS1) which activates the IKK-related kinases: TBK1 and IKBE which phosphorylate interferon regulatory factors: IRF3 and IRF7 which in turn activate transcription of antiviral immunological genes, including interferons (IFNs), IFN-alpha and IFN-beta. Responsible for detecting the Picornaviridae family members such as encephalomyocarditis virus (EMCV), mengo encephalomyocarditis virus (ENMG), and theiler's murine encephalomyelitis virus (TMEV). Can also detect other viruses such as dengue virus (DENV), west Nile virus (WNV), and reovirus. Also involved in antiviral signaling in response to viruses containing a dsDNA genome, such as vaccinia virus. Plays an important role in amplifying innate immune signaling through recognition of RNA metabolites that are produced during virus infection by ribonuclease L (RNase L). May play an important role in enhancing natural killer cell function and may be involved in growth inhibition and apoptosis in several tumor cell lines. {ECO:0000269 PubMed:12015121, ECO:0000269 PubMed:16625202, ECO:0000269 PubMed:17942531, ECO:0000269 PubMed:19656871, ECO:0000269 PubMed:21217758}.</p>
Molecular Weight:	116.9 kDa Including tag.
UniProt:	Q8R5F7
Pathways:	Activation of Innate immune Response

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value 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: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process