

Datasheet for ABIN7554140 **IFIH1 Protein (AA 1-1025) (His tag)**



Overview

Quantity:	1 mg
Target:	IFIH1
Protein Characteristics:	AA 1-1025
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IFIH1 protein is labelled with His tag.

Product Details

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Purpose:	Custom-made recombinant IFIH1 Protein expressed in mammalian cells.
Sequence:	MSNGYSTDEN FRYLISCFRA RVKMYIQVEP VLDYLTFLPA EVKEQIQRTV ATSGNMQAVE
	LLLSTLEKGV WHLGWTREFV EALRRTGSPL AARYMNPELT DLPSPSFENA HDEYLQLLNL
	LQPTLVDKLL VRDVLDKCME EELLTIEDRN RIAAAENNGN ESGVRELLKR IVQKENWFSA
	FLNVLRQTGN NELVQELTGS DCSESNAEIE NLSQVDGPQV EEQLLSTTVQ PNLEKEVWGM
	ENNSSESSFA DSSVVSESDT SLAEGSVSCL DESLGHNSNM GSDSGTMGSD SDEENVAARA
	SPEPELQLRP YQMEVAQPAL EGKNIIICLP TGSGKTRVAV YIAKDHLDKK KKASEPGKVI
	VLVNKVLLVE QLFRKEFQPF LKKWYRVIGL SGDTQLKISF PEVVKSCDII ISTAQILENS
	LLNLENGEDA GVQLSDFSLI IIDECHHTNK EAVYNNIMRH YLMQKLKNNR LKKENKPVIP
	LPQILGLTAS PGVGGATKQA KAEEHILKLC ANLDAFTIKT VKENLDQLKN QIQEPCKKFA
	IADATREDPF KEKLLEIMTR IQTYCQMSPM SDFGTQPYEQ WAIQMEKKAA KEGNRKERVC
	AEHLRKYNEA LQINDTIRMI DAYTHLETFY NEEKDKKFAV IEDDSDEGGD DEYCDGDEDE
	DDLKKPLKLD ETDRFLMTLF FENNKMLKRL AENPEYENEK LTKLRNTIME QYTRTEESAR

GIIFTKTRQS AYALSQWITE NEKFAEVGVK AHHLIGAGHS SEFKPMTQNE QKEVISKFRT GKINLLIATT VAEEGLDIKE CNIVIRYGLV TNEIAMVQAR GRARADESTY VLVAHSGSGV IEHETVNDFR EKMMYKAIHC VQNMKPEEYA HKILELQMQS IMEKKMKTKR NIAKHYKNNP SLITFLCKNC SVLACSGEDI HVIEKMHHVN MTPEFKELYI VRENKALQKK CADYQINGEI ICKCGQAWGT MMVHKGLDLP CLKIRNFVVV FKNNSTKKQY KKWVELPITF PNLDYSECCL FSDED 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. Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer. 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Grade: custom-made Target Details IFIH1 Target: Alternative Name: IFIH1 (IFIH1 Products) Background: Interferon-induced helicase C domain-containing protein 1 (EC 3.6.4.13) (Clinically amyopathic dermatomyositis autoantigen 140 kDa) (CADM-140 autoantigen) (Helicase with 2 CARD domains) (Helicard) (Interferon-induced with helicase C domain protein 1) (Melanoma

differentiation-associated protein 5) (MDA-5) (Murabutide down-regulated protein) (RIG-I-like receptor 2) (RLR-2) (RNA helicase-DEAD box protein 116), FUNCTION: 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 pro-inflammatory cytokines (PubMed:32169843, PubMed:33727702, PubMed:28594402). Its ligands include mRNA lacking 2'-O-methylation at their 5' cap and longdsRNA (>1 kb in length) (PubMed:22160685). Upon ligand binding it associates with mitochondria antiviral signaling protein (MAVS/IPS1) which activates the IKK-related kinases: TBK1 and IKBKE 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 rhinovirus (PubMed:28606988). Detects coronavirus SARS-CoV-2 (PubMed:33440148, PubMed:33514628). 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:14645903, ECO:0000269|PubMed:19211564, ECO:0000269|PubMed:19656871, ECO:0000269|PubMed:21217758, ECO:0000269|PubMed:21742966, ECO:0000269|PubMed:22160685, ECO:0000269|PubMed:28594402, ECO:0000269|PubMed:28606988, ECO:0000269|PubMed:29117565, ECO:0000269|PubMed:33440148, ECO:0000269|PubMed:33514628, ECO:0000269|PubMed:33727702}.

Molecular Weight:	116.7 kDa
UniProt:	Q9BYX4

Pathways: Activation of Innate immune Response

Application Details

Application Notes: We expect the protein to work for functional studies. 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