

# Active Recombinant Full Length Human IFIH1 Protein, C-Flag-tagged

Cat. No. IFIH1-04HFL Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Full Length Human IFIH1 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
<b>Species</b>	Human
<b>Source</b>	Mammalian Cells
<b>Description</b>	<p>IFIH1 encodes MDA5 which is an intracellular sensor of viral RNA that triggers the innate immune response. Sensing RNA length and secondary structure, MDA5 binds dsRNA oligonucleotides with a modified DExD/H-box helicase core and a C-terminal domain, thus leading to a proinflammatory response that includes interferons. It has been shown that Coronaviruses (CoVs) as well as various other virus families, are capable of evading the MDA5-dependent interferon response, thus impeding the activation of the innate immune response to infection. MDA5 has also been shown to play an important role in enhancing natural killer cell function in malaria infection. In addition to its protective role in antiviral responses, MDA5 has been implicated in autoimmune and autoinflammatory diseases such as type 1 diabetes, systemic lupus erythematosus, and Aicardi-Goutieres syndrome.</p>
<b>Form</b>	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
<b>Bio-activity</b>	ELISA capture for autoantibodies
<b>Molecular Mass</b>	116.5 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**AA Sequence**

MSNGYSTDENFRYLISCFRARVKMYIQVEPVLDTFLPAEVKEQIQRTVATSGNMQ  
 AVELLLSTLEKGV WHLGWTRFVEALRRTGSPLAARYMNPETDLPSPSFENAHDE  
 YLQLLNLLQPTLVDKLLVRDVLDKCME EELLTIEDRNRIAAAENNGNESGVRELLKRI  
 VQKENWFS AFLNVLRQTGNNELVQELTGSDCSESNAEIE NLSQVDGPQVEEQLLST  
 TVQPNLEKEVWGMENNSSESSFADSSVVSESDTSLAEGSVSCLDESLGHNSNM G  
 SDSGTMGSDSDEENVAARASPEPELQLRPYQMEVAQPALEGKNIICLPTGSGKTRV  
 AVYIAKDHLDDK KKASEPGKVIVLVNKVLLVEQLFRKEFQPFLKKWYRVIGLSGDTQL  
 KISFPEVVKSCDIIISTAQILENS LLNLENGEDAGVQLSDFSLIIDECHHTNKEAVYNNI  
 MRHYLMQKLKNNRLKKNKPVIPQLGLTAS PGVGGATKQAKAEHILKLCANLD  
 AFTIKTVKENLDQLKNQIQEPCKKFAIADATREDPFKEKLEIMTR IQTYCQMSPMSD  
 FGTQPYEQWAIQMEKKAKEGNRKERVCAEHLRKYNEALQINDTIRMIDAYTHLET  
 Y NEEKDKKFAVIEDDSDEGGDEYCDGDEDEDLKKPLKDETRFLMTLFFENK  
 MLKRLAENPEYENEK LTKLRNTIMEQYTRTEESARGIIFTKTRQSAYALSQWITENEK  
 FAEVGVKAHHLIGAGHSSEFKPMTQNE QKEVISKFRGTGKINLLIATTVAEEGLDIKEC  
 NIVIRYGLVTNEIAMVQARGRARADESTYVLVAHSGSGV IERETVNDFREKMMYKAI  
 HCVQNMKPEEYAHKILELQMQSIMEKKMKTKRNIKHYKNNLSLITFLCKNC SVLAC  
 SGEDIHVIEKMHHVNMTPFEKELYIVRENKTLQKKCADYQINGEIIICKCGQAWGTMM  
 VHKGLDLP  
 CLKIRNFVVFKNNSTKKQYKKWVELPITFPNLDYSECCLFSDDEDTRTRPLEQKLISE  
 EDLAANDILDYKDDDDKV

<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining.
<b>Stability</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>Storage</b>	Store at -80 centigrade.
<b>Concentration</b>	>50 ug/mL as determined by microplate BCA method.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)
 Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Preparation</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Protein Families</b>	RIG-I-like receptor signaling pathway
<b>Full Length</b>	Full L.

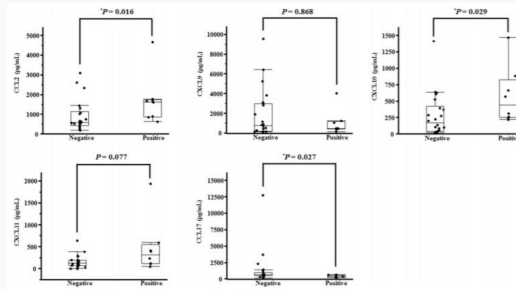
## GENE INFORMATION

<b>Gene Name</b>	IFIH1 interferon induced with helicase C domain 1 [ Homo sapiens (human) ]
<b>Official Symbol</b>	IFIH1
<b>Synonyms</b>	AGS7; Hlcd; IDDM19; MDA-5; MDA5; RLR-2; SGMRT1
<b>Gene ID</b>	64135
<b>mRNA Refseq</b>	NM_022168.4
<b>Protein Refseq</b>	NP_071451.2
<b>MIM</b>	606951
<b>UniProt ID</b>	Q9BYX4

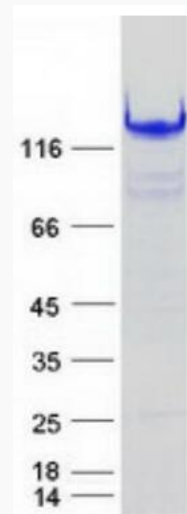
 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



Comparison of each of the chemokine levels (CCL2, CXCL11, CXCL9, CCL17, CXCL10) between anti-MDA5 antibody-positive and -negative patients. Anti-MDA5 antibody status was determined by ELISA using recombinant MDA5/IFIH1 antigen.



Coomassie blue staining of purified IFIH1 protein.

Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA