

Product datasheet for PH315661

MDA5 (IFIH1) (NM_022168) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	IFIH1 MS Standard C13 and N15-labeled recombinant protein (NP_071451)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC215661
Predicted MW:	116.5 kDa
Protein Sequence:	>RC215661 representing NM_022168 Red=Cloning site Green=Tags(s)

MSNGYSTDENFRYLISCFRFRARVKMYIQVEPVLDYLTFLPAEVKEQIQRTVATSGNMQAVELLSTLEKGV
WHLGWTREFVEALRRRTGSPLAARYMNPDLTLPSPSFENAHDEYLQLLNLLQPTLVDKLLVRDVLDKCME
EELLTIEDRNRIAAAENNGNESGVRELLKRIVQKENWFS AFLNVL RQTGNNELVQELTGSDCSESNAEIE
NLSQVDGPPQVEEQLLSTTVQPNLEKEVWGMENSSSESSFADSSVSESDTSLAEGSVSCLDES LGHNSNM
GSDSGTMSGSDSEENVAARASPEPELQLRPYQMEVAQPALEGKNIICLPTGSGKTRVAVYIAKDHLDDK
KKASEPGKVIVLVNKVLLVEQLFRKEFQPFLKKWYRVIGLSGDTQLKISFPEVVKSCDIIISTAQILENS
LLNLENGEDAGVQLSDFSLIIDECHHTNKEAVYNNIMRHYLMQKLNKNNRLLKKNKPKVIPLPQILGLTAS
PGVGGATKQAKAEHILKLCANLDAFTIKTVKENLDQLKNQIQEPCKKFAIADATREDPFKEKLEIMTR
IQTYCQMSPMSDFGTQPYEQWAIQMEKKAKEGNRERVCAEHLRKYNEALQINDTIRMIDAYTHLET FY
NEEKDKKFAVIEDDSDEGGDDEYCDGDEDEDLKKPLKLDDETRFLMTLFFENNKMLKRLAENPEYENEK
LTKLRNTIMEQYTRTEESARGIIFTKTRQSAYALSQWITENEKFAEVGVKAHHLIGAGHSSEFKPMTQNE
QKEVISKFRGKINLLIATTVAEEGLDIKECNIVIRYGLVTNEIAMVQARGRARADESTYVLAHSGSGV
IERETVNDFREKMMYKAIHCVQNMKPEEYAHKILELQMQSIMEKMKTKRNI AKHYKNNLSLITFLCKNC
SVLACSGEDIHVIEKMHHVNMTPFEKELYIVRENKTLQKCADYQINGEIIICKCGAWGTMVHKGLDLP
CLKIRNFVVVFKNNSTKKQYKKWVLPITFPNLDYSECCLFSD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.

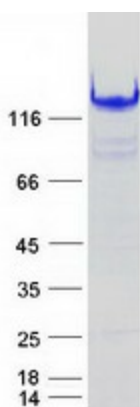


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Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_071451
RefSeq Size:	3434
RefSeq ORF:	3075
Synonyms:	AGS7; Hlcd; IDDM19; MDA-5; MDA5; RLR-2; SGMRT1
Locus ID:	64135
UniProt ID:	Q9BYX4
Cytogenetics:	2q24.2
Summary:	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[provided by RefSeq, Jul 2020]

Protein Pathways: RIG-I-like receptor signaling pathway

Product images:



Coomassie blue staining of purified IFIH1 protein (Cat# [TP315661]). The protein was produced from HEK293T cells transfected with IFIH1 cDNA clone (Cat# [RC215661]) using MegaTran 2.0 (Cat# [TT210002]).