

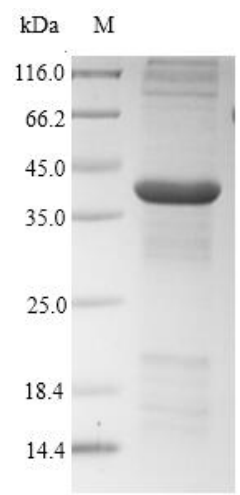
Recombinant Human Interferon-induced helicase C domain-containing protein 1(IFIH1) ,partial

Catalog Number:RPC20312

Product Name	Recombinant Human Interferon-induced helicase C domain-containing protein 1(IFIH1) ,partial
Catalog Number	RPC20312
Expression host	<i>E.coli</i>
Product Info	N-terminal 6xHis-tagged
Storage Buffer	10mM Tris-HCl, 1 mM EDTA, pH 8.0, 20% glycerol
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Relevance	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 IKKε which phosphorylate interferon regulatory factors: IRF3 and IRF7 which in turn activate transcription of antiviral immunological genes, including interferons (IFNs); IFN-α and IFN-β. Responsible for detecting the Picornaviridae family members such as encephalomyocarditis virus (EMCV) and mengo encephalomyocarditis virus (ENMG). 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.
AA sequence	KLTKLRNTIMEQYTRTEESARGIIFTKTRQSAYALSQWITENEKFAEVGVKAH HLIGAGHSSEFKPMTQNEQKEVISKFRTGKINLLIATTVAEEGLDIKECNIVIRY GLVTNEIAMVQARGRARADESTYVLVAHSGSGVIEHETVNDFREKMMYKAI HCVQNMKPEEYAHKILELQMQSIMEKKMKTKRNIKHYKNNPSLITFLCKNC SVLACSGEDIHVIEKMHHVNMTPEFKELYIVRENKALQKKCADYQINGEIICK

	CGQAWGTMMVHKGLDLPCLKIRNFVVVFKNNSTKKQYKKWVELPITFPNLD YSECCLFSDED
References	"mda-5: an interferon-inducible putative RNA helicase with double-stranded RNA-dependent ATPase activity and melanoma growth-suppressive properties." Kang D.-C., Gopalkrishnan R.V., Wu Q., Jankowsky E., Pyle A.M., Fisher P.B. Proc. Natl. Acad. Sci. U.S.A. 99:637-642(2002)

Certificate of Analysis

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Expression host	<i>E. coli</i>	
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Buffer	10mM Tris-HCl, 1 mM EDTA, pH 8.0, 20% glycerol	
Batch Number	03228	
Nature	Human IFIH1-(AA 700-1025) - Q9BYX4 - Partial Protein	
Purification	Affinity purified using IMAC	
Recommended Storage	Short term	2 to 8 °C, one week from the date of receipt
	Long term	-20 to -80 °C, six months from the date of receipt
Form	Liquid	
Date of manufacture	2016.10.26	
Test Items	Specifications	Results
Appearance	Clear Solution	pass
Concentration	0.1-5 mg/ml, by the Bradford Method.	1.5 mg/ml
Purity	≥90%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.	
Molecular Weight	Predicted band size: 40.18kDa	

Electrophoretic parameters	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
Aseptic Processing	Not done
Endotoxin Level	Untreated
Activity	Not tested
Conclusion	pass