

Product datasheet for **MG211363**

Ifih1 (BC080200) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ifih1 (BC080200) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ifih1
Synonyms:	Helicard, Hlcd, MDA5, MDA-5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG211363 representing BC080200
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGATTGTCTGTTCTGCAGAGGACAGCTTCAGGAATCTCATCTTATTCTTCAGGCCAGGCTGAAAA
 TGTACATTCAGGTGGAGCCAGTCTGGACCACCTCATCTTTCTGTCTGCAGAAACCAAAGAGCAGATTCT
 TAAAAAGATCAACACCTGTGGTAAACACAGCGCGCAGAACTGCTGCTGAGCACCTTGGAGCAGGGACAG
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 GCCTATCAGATTTCTGATCTTGACTACTCAGAATACTGCTTGTATAGTATGATGAAGAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG211363 representing BC080200
 Red=Cloning site Green=Tags(s)

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MSIVCSAEDSFRNLILFFRPRLKMYIQVEPVL DHLIFLSAETKEQILKKINTCGNTSAAELLLSTLEQGG
WPLGWTQMFVEALEHSGNPLAARYVKPTLIDLSPSPSETAHDECLHLLTLLQPTLVDKLLINDVLDTCFE
KGLLTVEDNRNRIISAAGNSGNE SGVRELLRRIVQKENWFSTFLDVL RQTGNDA LFQELTGGGCPEDNTESD
TSLAEGSVSCFDESLGHNSNMGRDSGTMGSDSDESIVIQTKRVSPPELQLRPYQMEVAQPALDGKNIIC
LPTGSGKTRVAVYITKDHL DKKKQASESGKVIVLVNKVMLAEQLFRKEFNPYLKKWYRIIGLSGDTQLKI
SFPEVVKSYDVIISTAQILENSLLNLESGDDG VQLSDFSLIIDECHHTNKEAVYNNIMRRYLKQKLRN
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FVIADDTRENPFKEKLEIMASIQTYCQKSPMSDFGTQH YEQWAIQMEKKA AKDGNR KDRVCAEHLRKYN
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FFDNKKMLKKLAENPKYENEKLIKLRNTILEQFTRSEESSRGIIFTKTRQSTYALSQWIMENAKFAEVGV
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RGRARADESTYVLTSSGSGVTEREIVNDFREKMMYKAINRVQNMKPEEYAHKILELQVQSILEKKMKVK
RSIAKQYNDNPSLITLLCKNCSMLVCSGENIHVIEKMHHVNMTP EFKGLYIVRENKALQKKFADYQTNGE
IICKCGQAWGTMVHKGLDLPCLKIRNFV VNFKNNSPKKQYKKWVELPIRFPDL DYSEYCLYSD E
  
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TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



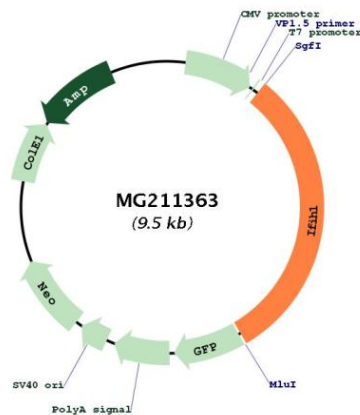
ACCN: BC080200

ORF Size: 2930 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>BC080200</u> , <u>AAH80200</u>
RefSeq Size:	3635 bp
RefSeq ORF:	2930 bp
Locus ID:	71586
Cytogenetics:	2 C1.3

Gene Summary:

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), 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.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG211363