

Product datasheet for RC202067

IFITM2 (NM_006435) Human Tagged ORF Clone

Product data:

OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	IFITM2 (NM_006435) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IFITM2
Synonyms:	1-8D; DSPA2c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>>RC202067 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGAACCACATTGTGCAAACCTTCTCTCCTGTCAACAGCGGCCAGCCTCCCAACTACGAGATGCTCAAGG AGGAGCAGGAAGTGGCTATGCTGGGGGGCGCCCCACAACCCTGCTCCCCCGACGTCCACCGTGATCCACAT CCGCAGCGAGACCTCCGTGCCTGACCATGTCGTCTGGTCCCTGTTCAACACCCTCTTCATGAACACCCTGC TGCCTGGGCTTCATAGCATTCGCCTACTCCGTGAAGTCTAGGGACAGGAAGATGGTTGGCGACGTGACCG GGGCCCAGGCCTATGCCTCCACCGCCAAGTGCCTGAACATCTGGGCCCTGATTTTGGGCATCTTCATGAC CATTCTGCTCGTCATCATCCCAGTGTTGGTCGTCCAGGCCCAGCGA
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG GTTTAA
Protein Sequence:	>RC202067 protein sequence <mark>Red</mark> =Cloning site Green=Tags(s)
	MNHIVQTFSPVNSGQPPNYEMLKEEQEVAMLGAPHNPAPPTSTVIHIRSETSVPDHVVWSLFNTLFMNTC CLGFIAFAYSVKSRDRKMVGDVTGAQAYASTAKCLNIWALILGIFMTILLVIIPVLVVQAQR
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6125_d10.zip
Restriction Sites:	Sgfl-Mlul



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Cloning Scheme:



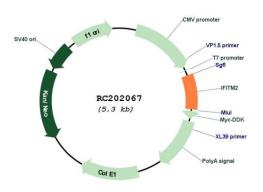
* The last codon before the Stop codon of the ORF

ACCN:	NM_006435
ORF Size:	396 bp
OTI Disclaimer:	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. <u>More info</u>
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:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM 006435.2</u>
RefSeq Size:	738 bp
RefSeq ORF:	399 bp

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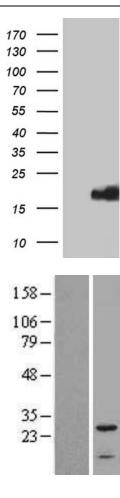
	IFITM2 (NM_006435) Human Tagged ORF Clone – RC202067
Locus ID:	10581
UniProt ID:	<u>Q01629</u>
Cytogenetics:	11p15.5
Domains:	CD225
Protein Families	Transmembrane
MW:	14.6 kDa
Gene Summary:	IFN-induced antiviral protein which inhibits the entry of viruses to the host cell cytoplasm, permitting endocytosis, but preventing subsequent viral fusion and release of viral contents into the cytosol. Active against multiple viruses, including influenza A virus, SARS coronavirus (SARS-CoV), Marburg virus (MARV), Ebola virus (EBOV), Dengue virus (DNV), West Nile virus (WNV), human immunodeficiency virus type 1 (HIV-1) and vesicular stomatitis virus (VSV). Can inhibit: influenza virus hemagglutinin protein-mediated viral entry, MARV and EBOV GP1,2- mediated viral entry, SARS-CoV S protein-mediated viral entry and VSV G protein-mediated viral entry. Induces cell cycle arrest and mediates apoptosis by caspase activation and in p53- independent manner.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC202067

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HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IFITM2 (Cat# RC202067, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-IFITM2 (Cat# [TA811625])(1:2000). Positive lysates [LY401937] (100ug) and [LC401937] (20ug) can be purchased separately from OriGene.

Western blot validation of overexpression lysate (Cat# [LY401937]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202067 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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