

Product datasheet for RC201617

IFITM1 (NM_003641) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: Myc-DDK
Symbol: IFITM1
Synonyms: 9-27; CD225; DSPA2a; IFI17; LEU13
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC201617 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCACAAGGAGGAACATGAGGTGGCTGTGCTGGGGGACCCCCAGCACCATCCTTCCAAGGTCCACCG
 TGATCAACATCCACAGCGAGACCTCCGTGCCGACCATGTCGTCTGGTCCCTGTTCAACACCCTCTTCTT
 GAAGTGGTGTCTGGGCTTCATAGCATTGCGCTACTCCGTGAAGTCTAGGGACAGGAAGATGGTTGGC
 GACGTGACCGGGGCCAGGCCTATGCCTCCACCGCCAAGTGCCTGAACATCTGGGCCCTGATTCTGGGCA
 TCCTCATGACCATTGGATTATCCTGTTACTGGTATTCGGCTCTGTGACAGTCTACCATATTATGTTACA
 GATAATACAGGAAAAACGGGGTTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201617 protein sequence
 Red=Cloning site Green=Tags(s)

MHKEEHEVAVLGAPPSTILPRSTVINIHSETSVDPDHVVWSLFNTLFLNWCLGFIAFAYSVKSRDRKMVG
 DVTGAQAYASTAKCLNIWALILGILMTIGFILLLVFGSVTVYHIMLQIIQEKRGY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6014_h08.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_003641

ORF Size: 375 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. [More info](#)

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:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003641.4](#)

RefSeq Size: 733 bp

RefSeq ORF: 378 bp
 Locus ID: 8519
 UniProt ID: [P13164](#)
 Cytogenetics: 11p15.5
 Domains: CD225

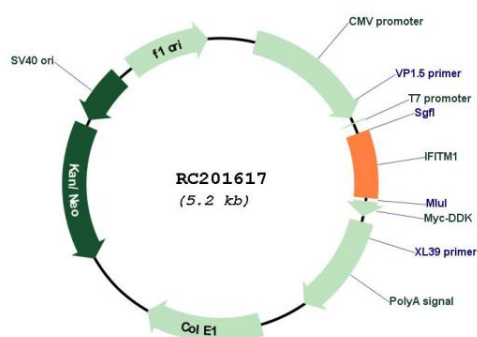
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: B cell receptor signaling pathway

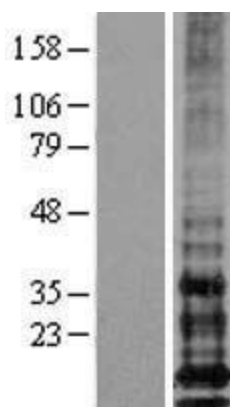
MW: 13.9 kDa

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 hepatitis C virus (HCV). Can inhibit: influenza virus hemagglutinin protein-mediated viral entry, MARV and EBOV GP1,2-mediated viral entry and SARS-CoV S protein-mediated viral entry. Also implicated in cell adhesion and control of cell growth and migration. Plays a key role in the antiproliferative action of IFN-gamma either by inhibiting the ERK activation or by arresting cell growth in G1 phase in a p53-dependent manner. Acts as a positive regulator of osteoblast differentiation. [UniProtKB/Swiss-Prot Function]

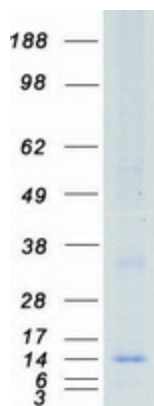
Product images:



Circular map for RC201617



Western blot validation of overexpression lysate (Cat# [LY401205]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201617 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IFITM1 protein (Cat# [TP301617]). The protein was produced from HEK293T cells transfected with IFITM1 cDNA clone (Cat# RC201617) using MegaTran 2.0 (Cat# [TT210002]).