OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC229401

JMY (NM_152405) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JMY (NM_152405) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	JMY
Synonyms:	WHAMM2; WHDC1L3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC229401 representing NM_152405
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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ATGTCGTTCGCGCTGGAGGAGACGCTCGAGTCGGACTGGGTGGCTGTGCGGCCCCATGTGTTCGACGAGC
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Protein Sequence:

>RC229401 representing NM_152405
Red=Cloning site Green=Tags(s)

MSFALEETLESDWVAVRPHVFDEREKHKFVFIVAWNEIEGKFAITCHNRTAQRQRSGSREQAGARGGAEA
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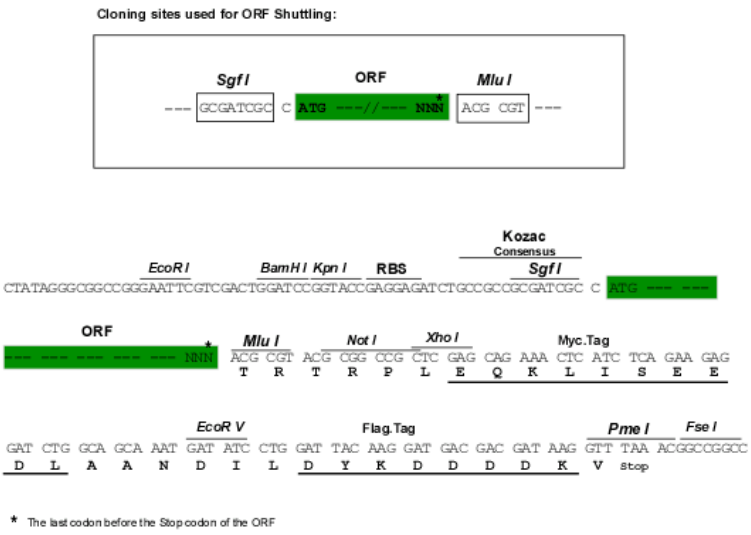
Chromatograms: https://cdn.origene.com/chromatograms/mk8035_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_152405
ORF Size:	2964 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.
RefSeq:	NM_152405.3, NP_689618.3
RefSeq ORF:	2967 bp
Locus ID:	133746

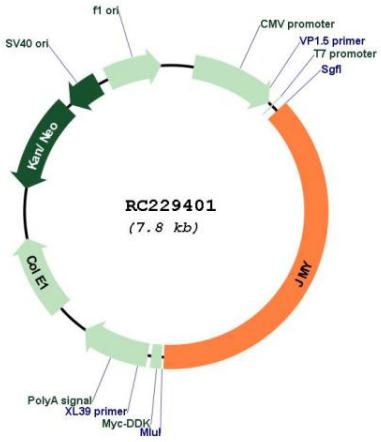
UniProt ID: Q8N9B5

Cytogenetics: 5q14.1

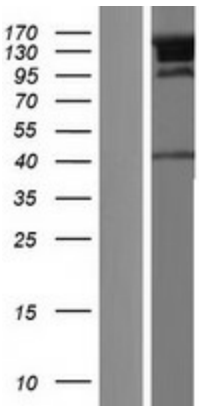
MW: 111.3 kDa

Gene Summary: Acts both as a nuclear p53/TP53-cofactor and a cytoplasmic regulator of actin dynamics depending on conditions. In nucleus, acts as a cofactor that increases p53/TP53 response via its interaction with p300/EP300. Increases p53/TP53-dependent transcription and apoptosis, suggesting an important role in p53/TP53 stress response such as DNA damage. In cytoplasm, acts as a nucleation-promoting factor for both branched and unbranched actin filaments. Activates the Arp2/3 complex to induce branched actin filament networks. Also catalyzes actin polymerization in the absence of Arp2/3, creating unbranched filaments. Contributes to cell motility by controlling actin dynamics. May promote the rapid formation of a branched actin network by first nucleating new mother filaments and then activating Arp2/3 to branch off these filaments. The p53/TP53-cofactor and actin activator activities are regulated via its subcellular location (By similarity).[UniProtKB/Swiss-Prot Function]

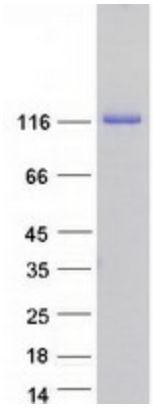
Product images:



Circular map for RC229401



Western blot validation of overexpression lysate (Cat# [LY432410]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229401 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified JMY protein (Cat# [TP329401]). The protein was produced from HEK293T cells transfected with JMY cDNA clone (Cat# RC229401) using MegaTran 2.0 (Cat# [TT210002]).