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Product datasheet for RC211616

MIA3 (NM_198551) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MIA3 (NM_198551) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MIA3
Synonyms:	ARNT; D320; TANGO; TANGO1; UNQ6077
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC211616 representing NM_198551 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCTGCGGCGCCTGGGCTGCTCGTCTGGCTGCTCGTGCTCCGGCTGCCCTGGCGGGTGCCGGGCCAGC TGGACCCCAGCACTGGCCGGCGGTTCTCGGAGCACAAACTCTGCGCGGACGACGAATGCAGCATGTTAAT GTACCGCGGTGAGGCTCTTGAAGATTTCACAGGCCCGGATTGTCGTTTTGTGAATTTTAAAAAAGGTGAT CCTGTATATGTTTACTATAAACTGGCAAGAGGATGGCCTGAAGTTTGGGCTGGAAGTGTTGGACGCACTT TTGGATATTTTCCAAAAGATTTAATCCAGGTAGTTCATGAATATACCAAAGAAGAGCTACAAGTTCCAAC AGATGAGACGGATTTTGTTTGTTTTGATGGAGGAAGAGATGATTTTCATAATTATAATGTAGAAGAACTT TTAGGGTTTTTGGAACTGTACAATTCTGCAGCTACAGATTCTGAGAAAGCTGTAGAAAAAACTTTACAGG ATATGGAAAAAAACCCTGAATTATCTAAGGAAAGGGAACCTGAACCTGAACCAGTAGAAGCCAACTCAGA GGAAAGTGATAGTGTATTCTCAGAAAACACTGAGGATCTTCAGGAACAGTTTACAACTCAGAAGCACCAC TCCCATGCAAACAGCCAAGCAAATCATGCTCAGGGAGAGCAGGCTTCATTTGAATCTTTTGAAGAAATGC TGCAAGATAAACTAAAAGTGCCAGAAAGTGAAAACAACAAAACCAGCAATAGTTCTCAGGTCTCAAATGA ACAGGATAAGATTGATGCCTATAAACTTTTGAAAAAAGAAATGACTCTAGACTTGAAAACCAAATTTGGC TCAACAGCTGATGCACTTGTATCTGATGATGAGACAACCAGACTCGTTACTTCATTAGAAGATGATTTTG ATGAGGAATTGGATACTGAGTATTATGCAGTTGGAAAGGAAGATGAGGAGAACCAAGAAGACTTTGATGA GTTGCCATTACTTACCTTTACAGATGGGGAAGATATGAAAACTCCAGCAAAGTCTGGCGTTGAGAAATAT CCAACAGATAAAGAGCAGAATTCAAATGAAGAGGACAAGGTTCAGCTAACTGTGCCCCCTGGCATCAAAA ATGATGATAAAAATATACTAACAACCTGGGGGGACACTATCTTCTCTATTGTCACAGGAGGTGAAGAAAC AAGAGATACGATGGATTTAGAGAGCTCTAGTTCAGAGGAAGAAAAAGAAGATGATGATGATGCATTAGTC CCAGATAGCAAACAGGGGAAACCACAGTCAGCAACAGATTATAGTGACCCTGACAATGTAGATGATGGTC TTTTTATTGTAGACATTCCTAAAACAAATAATGACAAAGAAGTAAACGCAGAACATCACATTAAAGGAAA AGGGAGGGGAGTTCAGGAATCCAAGAGGGGCCTGGTACAAGATAAGACAGAATTAGAGGATGAAAATCAA GAAGGCATGACTGTGCACAGTTCTGTTCACAGCAATAACCTCAACTCTATGCCAGCTGCTGAAAAGGGTA

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Protein Sequence:

>RC211616 representing NM_198551
Red=Cloning site Green=Tags(s)

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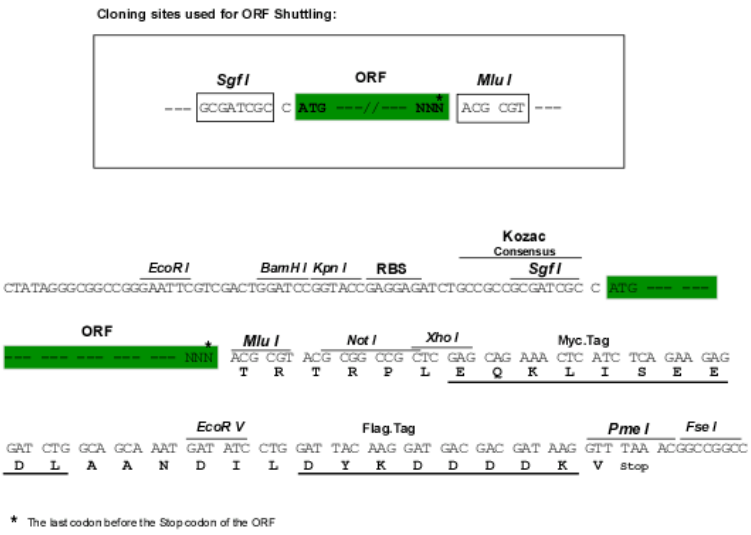
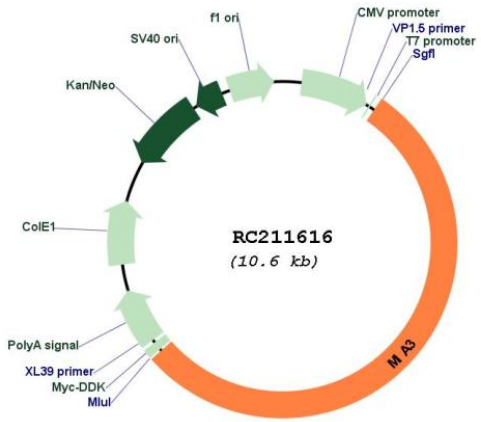
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_198551

ORF Size: 5721 bp

OTI Disclaimer:	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. 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_198551.4
RefSeq Size:	8123 bp
RefSeq ORF:	5724 bp
Locus ID:	375056
UniProt ID:	Q5JRA6
Cytogenetics:	1q41
MW:	213.5 kDa

Gene Summary: Plays a role in the transport of cargos that are too large to fit into COPII-coated vesicles and require specific mechanisms to be incorporated into membrane-bound carriers and exported from the endoplasmic reticulum. This protein is required for collagen VII (COL7A1) secretion by loading COL7A1 into transport carriers. It may participate in cargo loading of COL7A1 at endoplasmic reticulum exit sites by binding to COPII coat subunits Sec23/24 and guiding SH3-bound COL7A1 into a growing carrier. Does not play a role in global protein secretion and is apparently specific to COL7A1 cargo loading. However, it may participate in secretion of other proteins in cells that do not secrete COL7A1. It is also specifically required for the secretion of lipoproteins by participating in their export from the endoplasmic reticulum (PubMed:27138255, PubMed:19269366). Required for correct assembly of COPII coat components at endoplasmic reticulum exit sites (ERES) and for the localization of SEC16A and membrane-bound ER-resident complexes consisting of MIA2 and PREB/SEC12 to ERES (PubMed:28442536).[UniProtKB/Swiss-Prot Function]