

Product datasheet for **MR211036**

Mios (NM_145374) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mios (NM_145374) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mios
Synonyms:	C81488
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>MR211036 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

 ATGAGCGGTACCAAGCCCGATATTTTGTGGGCACCAACCAAGTTGATAGATTTGTTGTATGTGACTCAG
AATTGAGCCTTTATCATGTGGAATCGGCTGTGAATTCAGAACTCAAAGCTGGATCGTTACGTTTATCTGA
AGACTCTGCAGCGACATTGCTGTCAATAAACTCAGATACACCCTATATGAAATGTGTTGCGTGGTATCTC
AATTATGATCCTGAATGTCTCCTAGCAGTTGGACAAGCAAATGGTCGAGTTGACTTACAAGTCTTGGTC
AAGATCATAACTTAAGTTCAAAGATTTGATAGGAAAAGAATTTGTTCCAAAGCATGCTCGCCAATGCAA
TACCCTTGCATGGAATCCACTGGATAGTAAGTGGCTTGTGCTGGTCTCGACAAACACAGAGCTGACTTT
TCAGTTCTAATATGGGATATCTGCAGCAAATATACTCCTGATATTGTTCCCATGGAAAAAGTGAGACTTT
CAGCAGGTGAAGCTGAAACAACATTACTAGTGACAAAACCGCTGTATGAGTTAGGGCAGAATGACGCTTC
TCTATCTCTGTGTTGGCTTCCACGAGACCAGAACTTCTTCTGCTGGCATGCATCGTAATCTAGCAATA
TTTGATCTCCGGAACACAAGCCAGAAGATGTTTGTAAATACAAAAGCTGTTCAAGGAGTGACAGTAGACC
CTTACTTCCACGATCGTGTGCTTCCTTCTATGAAGGTCAGGTTGCAATATGGGATCTTAGAAAAATTTGA
GAAGCCAGTTTGTACTTTGACTGAACAACCAAGCCCTTGACAAAGGTCGCATGGTGTCCAACAGGACA
GGCCTGCTTGCTACTTTAACAAGGGATAGTAATATTATTAGGCTGTATGATATGCAGCATACACCCACTC
CCATCGGGGATGAAACCGAACCCACAATAATTGAAAGAAGTGTGCAGCCTTGTGACAATTACATTGCTTC
CTTTGCATGGCATCCAACGAGTCAAAATCGAATGATAGTTTCTGACTCCCAACCGAACAATGTCTGACTTC
ACTGTATTTGAAAGGATATCTCTTGCCTGGAGCCCAATTACATCTTTAATGTGGGCTTGTGGTCGCCATT
TGTATGAGTGTGCAGAAGAAGAAAGTGATAACTCCTTAGAAAAAGATATAGCAACAAAAATGCGCCTTCG
GGCTTTATCAAGGTATGGACTTGATACAGAACAGGTTTGGAGAAACACATTTTAGCTGGCAATGAAGAC
CCACAGCTCAAGTCACTCTGGTATACTCTGCACTTTATGAAGCAATATACAGAAGATAATGATCAAAAAAT
CTCCAGGCAACAAAGGATCATTGGTTTATGCAGGAATTAATCAATAGTAAATCATCTTTGGGAATGGT
AGAAAGCAGCAGACATAATTGGAGTGGCTTGGATAAACAACATGATATTCAGAACTTAAATGAAGAAAGG
ATTTTAGCATTACAGCTTTGTGGGTGGATAAAGAAAGGAACGGATGTAGATGTAGGGCCATTTTGAAGT
CCCTTGTGCAAGAAGGAGAATGGGAAAGAGCTGCTGCTGTGGCTTTGTTCAACTTGGATATTCGGCGAGC
AATCCAAATCCTGAATGAAGGGCGTCTTCAGAAAAAGGAGATCTGAATCTCAATGTGGTGGCAATGGCT
TTATCGGGGTATACGGACGAGAAGAACTCGCTGTGGCGGAGATGTGCAGCACCTGCGCCTGCAGCTCA
ACAACCCCTATCTGTGTGCATGTTTGCCTTCTGACGAGTGAAGCGGGGCATATGATGGAGTGTGTA
TGAAAAACAAAGTTGCTGTACGTGACAGAGTGGCATTGCTTGTAAATTCCTTGGTGATGCTCAGTTAAAT
AAATACATTGAAAAGCTGACCAATGAAATGAAAGAGGCTGGAAATTTGGAGGGGATCTTGCTTACAGGCC
TCACTAAAGATGGAGTGGACCTGATGGAGAGCTATGTGGATAGAAGTGGAGATGTTCAAACAGCAAGTTA
CTGCATGTTACAGGGTTCACCTTTAGATGTTCTGAAAGATGAAAGGGTTCATATTGGATTGAGAATTAC
AGAAATTTATTAGATGCCCTGGAGGTTTTGGCACAAAAGGCAGAAATTTGATATTCATAGGAGTAAGCTGG
ATCCCAGTTCAGGCTTTAGCACAGGTGTTTGTGAGTTGTAATTTTGTGGCAAATCAATCTCCTACAG
CTGTTCTCTGTGCCTCATCAGGCGAGAGGTTTTAGTCAGTATGGTGTGAGTGGCTCACCAACAAAATCC
AAAGTCACAAGCTGCCCTGGCTGTGCGAAACCCCTTCTCGATGTGCACTTTGCCCTATTAAATATGGGAA
CACCTGTTTCTAGCTGTCTGCTGGTGGATCCAAATCAGATGAAAAGGTGGACTTGAGCAAGGACAAAAAGTT
AGCTCAGTTTAACTGTTTACCTGGTGTACAACTGTGCGCATGGTGGGCATGCCGGACATATGCTG
AGTTGGTTCAGGGACCATGCAGAGTGTCTGTATCTGCATGCACGTGTAATGTATGCAGTTGGATACAA
CAGGAAATCTGGTGCCAGCAGAGACTGTCCAGCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211036 protein sequence
Red=Cloning site Green=Tags(s)

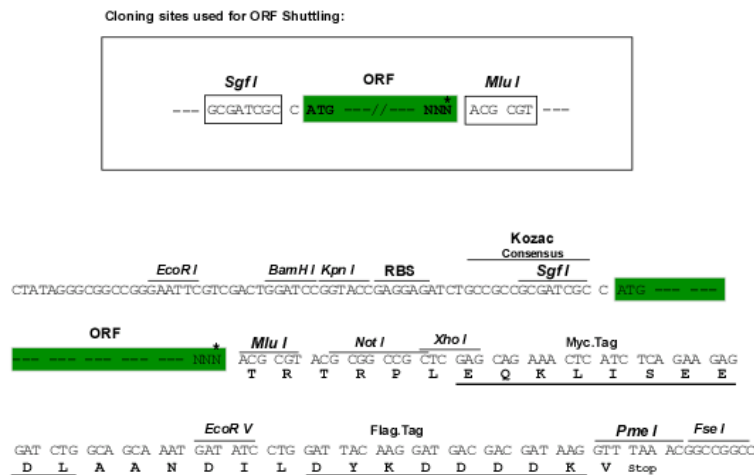
MSGTKPDILWAPHQVDRFVVCDSLESLYHVESAVNSELKAGSLRLSEDSAAATLLINSNDTPYMKCVAWYL
NYDPECLLAVGQANGRVVLTSLGQDHNKFKDLIGKEFVPKHARQCNTLAWNPLDSNWLAAGLDKHRADF
SVLIWDICSKYTPDIVPMEKVRLSAGEAETLLVTKPLYELGQNDASLSLWLPDQKLLLAGMHRNLAI
FDLRNTSQKMFVNTKAVQGVTVDPYFHDRVASFYEGQVAIWDLRKFEPVLTLEQPKPLTKVAVCPTRT
GLLATLTRDSNIIRLYDMQHTPTPIGDETEPTIIERSVQPCDNYIASFAWHPTSQNRMIVSTPNRTMSDF
TVFERISLAWSPITSLMWACGRHLYECAEEESDNSLEKDIATKMRLRALSRVGLDTEQVWRNHILAGNED
PQLKSLWYTLHFMKQYTEDNDQKSPGNKGSLVYAGIKSIVKSSLGMVESSRHNWSGLDKQTDIQNLNEER
ILALQLCGWIKKGTDDVGPFLNSLVQEGEWERAFAVFNLDIRRAIQILNEGASSEKGDNLNVVAMA
LSGYTDEKNSLWREMCSTLRLQLNNPYLCVMFAFLTSEAGAYDGLVYENKAVVRDRAVAFACKFLGDAQLN
KYIEKL TNEMKEAGNLEGILL TGLTKDGVLMESYVDRTGDVQTASYCMLQGSPLDVLKDERVQYWIENY
RNLLDAWRFWHKRAEFDIHRSLKDPSSKPLAQVFVSCNFCGKSISSYSCSSVPHQGRGFSQYGVSGSPTKS
KVTSCPGCRKPLPRCALCLINMGTPVSSCPGGSKSDEKVDLSKDKKLAQFNNWFTWCHNCRHGGHAGHML
SWFRDHAECPVSACTCKCMQLDTTGNLVAETVQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

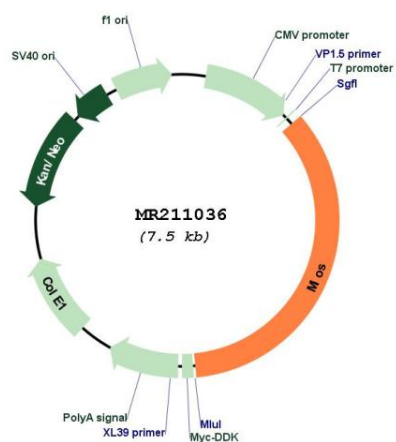
Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN:	NM_145374
ORF Size:	2625 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_145374.1 , NP_663349.1
RefSeq Size:	3724 bp
RefSeq ORF:	2628 bp
Locus ID:	252875
UniProt ID:	Q8VE19
Cytogenetics:	6 A1
MW:	98.3 kDa
Gene Summary:	As a component of the GATOR subcomplex GATOR2, functions within the amino acid-sensing branch of the TORC1 signaling pathway. Indirectly activates mTORC1 and the TORC1 signaling pathway through the inhibition of the GATOR1 subcomplex. It is negatively regulated by the upstream amino acid sensors SESN2 and CASTOR1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211036