

## Product datasheet for **MR211216**

### **Mkl1 (NM\_001082536) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mkl1 (NM_001082536) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mkl1
Synonyms:	AMKL; Bsac; Mal; Mrtf-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR211216 representing NM\_001082536  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCGCCTTTGAAAAGCCCGCTGCATTTTCATGAGCAGAGAAGAAGCCTGGAGCGGCCAGGACCGAGG  
 ACTATTTGAAACGAAGATCCGTTCCCGGCCGAGAGAGCAGAGCTGGTCAGGATGCACATTCTGGAAGA  
 GACCTCGGCTGAGCCTTCGCTCCAGGCCAAGCAGCTGAAGCTGAAGAGAGCCAGGCTGGCTGATGACCTC  
 AATGAAAAGATTGCACAGAGGCCTGGCCCCATGGAGCTGGTGGAGAAGAAATATCCTGCCTGTGGAGTCCA  
 GCCTGAAGGAGGCTATCATTGTGGGCCAGGTAATTACCCAAAGGTAGCAGACAGTTCTCTTCGACGA  
 GGACAGCAGCGATGCCCTGTCTCCTGAGCAGCCTGCCAGCCATGAGTCCCAGGGTTCAGTGCCATCACCC  
 TTGGAGTCCCAGTCAGTATCCACTGCCAGTCCACCTCCATATCACCCACTCAGGTTCTTTCTCAAC  
 TCCCAATGGCTCCGGATCCTGGAGAGACGCTTTTTCTGGCAGAGCAGCCTCCTCTGCCTCCCGCACCTCT  
 GCTGCCCCCAAGCCTAGCCAATGGAAGCATCGTCCCCTGCCAAGCCTGCTCCACACTCATCAAGCAA  
 AGCCAACCAAGTCTGCCAGCGAGAAATCACAGCGCAGCAAGAAGGCCAAGGAGCTGAAGCCAAAGGTGA  
 AGAAGTCAAGTACCACAGTACATCCCCCGGACCAGAAGCAGGACAAGGGGGCCCGCCATGGACTC  
 CTCTATGCCAAGATCCTGCAGCAGCAGCAGCTTTCCTGCAGCTGCAGATCCTCAACCAGCAGCAGCAG  
 CAGCAGCAGCAACAGCACTACAACCTACCAGGCCATCCTGCCTGCCCTCCCAAGCCCTCGGCTGAGACTC  
 CTGGAAGCAGTGGCCCTACCCATCACGCAGCCTCTCCACCAGTAGCAGCCCCAGCTCAGGCACCCCAAG  
 GCCAGCGGGCTGGCACGCCAGAGCAGCACCAGCTAGCTGCCAAACCAGGAGCCCTGCCAGCCAACCTG  
 GATGACATGAAGTGGCAGAGCTGAAGCAAGAAGTGAAGTTGCGGTCCCTTCCGCTCAGGCACCAAGA  
 CAGACTGATAGAAGCCTGCGTGCCTACCAAGCAAGTCAAGCCAGCTCCAGGACCCCAAGGCCCC  
 TGCCACCACCTCTGTGCTGCCAAGGCTGGTGAAGTGTGGTCCGCTTCCCTGCGGCCCTGCTAAGCACA  
 GGGTCAGCTCTTGTAAACAGCAGGCTTGCACCAGCTGAGATGGTGGTGGCCACAGTAACCAGCAATGGCA  
 TGGTGAAGTTTGGCAGCACAGGCTCCACACCCCGTGTCTCCACCCCTTCCAGAGCGCTCACTGCTCAG  
 CACGGGTGATGAGAATCCACACCTGGGGATGCCTTTGGTGAATGGTGAATCGCCGCTGACACAGCTC  
 ACCCTGCAGGCCCTCCCACTGCAGATCGTGAAGGAGGAGGGTGGCCGCTGCTGCTGCTGCTAAGCC  
 CTGGTGTGCGGGTGGAGGACTGGACAAGGACCAGATGCTGCAGGAGAAGGACAAGCAGATTGA  
 GGAGCTGACCCGAATGCTCCAACAGAAGCAGCAGCTGGTTGAGCTGCTGCGGCTACAGCTGGAGCAGCAG  
 AAGCGGGCCAGCAGCCAGCCCCAGCCAGCAGCCTGTGAAGAGGAAAGTGGTTTCTCCAGTTGCCAGC  
 TGAGCTGCCAGCCCCAGGGCTCTGCCATGCTTTTGGCTCTGGCCTAGTGGTTCCCACTACCAACCATGG  
 AGACACTCAGGCCCCAGCGCCAGAGTCCCCACCTGTGGTGGTGAAGCAGGAAGCTGGGCCACCTGAGCCA  
 GATCTGGCCCCAGCTCCAGCTGCTCTTGGGCTCCCAGGGCACCAGCTTCTCAAGAGGGTTCAGCCCTC  
 CTACCCTGGTCACTGACTCTACAGGGACTCACCTCATCTCACTGTGACCAATAAGAGTGTGATGGCCC  
 TGGCTTGCTGCAGGGAGCCCCAGCAGCCCTGTCCCAGCCTGGTTCTCCAGCCCTGGTCCACCTGCC  
 CAGATGGACCTGGAGCACCCACCTCAGCCTCCGTTTGAACCCCCACATCTCTGCTGAAGAAGGAGCCCC  
 CTGGTTATGAAGAGACTGTGACCAGCAGCCTAAGCAGCAGGAAAATGGCTCCTCCAGTCAGCAGCATGGA  
 TGATCTGTTTGAATTTATTTCAGAGTGGAGAGATTTTCAGCAGATTTCAAAGAGCCACCATCCCTACCA  
 GGCAAGGAAAAGTCACTCCAGCAGCAGCAGCTATGGGCTCCATTGACACCACAACCCCTGCCTTTGA  
 GTGAACTCCCCAAGCTGCTCCTCCACCAGGTTCCCCACCTCCAGGGCGCCTTGAAGACTTCTGGA  
 GAGCAGCACAGGGCTGCCCTGTGACAAGTGGGCACGAGGGACCAGAACCCCTTCCCTCATTGATGAC  
 CTCCACAGCCAGATGCTGAGCAGCTCCGCCATCCTGGACCACCCCCATCACCCATGGACACCTCTGAAT  
 TGCACCTTGTCTGAGCCAGCAGTGGTATGGGCTGGACCTGGCTGTTGGCCACCTGGACAGCATGGA  
 CTGGCTGGAGCTGCTGCTGGTGGCCCTGTGCTCAGCCTGGCTCCCTCAGCACTGCAGCCCCAGCCTC  
 TTCTCGATGGACTTCTGGATGGACACGACTTGCAGCTCCACTGGGATTCCTGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211216 representing NM\_001082536  
 Red=Cloning site Green=Tags(s)

MPPLKSPAAFHEQRRSLERARTEDYLKRRKIRSRPERAELVRMHILEETSAEPSLQAKQLKLRARLADDL  
 NEKIAQRPGMELVEKNILPVESSLKEAIIIVGQVNYPKVADSSSFDESDSDALSPEQPASHESQGSVPS  
 LESRVSDPLPSATSIPTQVLSQLPMADPGETLFLAEQPPLPPAPLLPPSLANGSIVPTAKPAPTLIKQ  
 SQPKSASEKSQRSKKAKELKPKVKLKYHYIIPDQKQDKGAPAMDSSYAKILQQQQLFLQLQILNQQQQ  
 QQQQHYNYQAILPAPPKPSAETPGSSAPTPSRSLSTSSSPSSGTPGPSGLARQSSSTALAAKPGALPANL  
 DDMKVAELKQELKLRSLPVSGTKTELIERLRAYQDQVSPAPGAPKAPATTSVLSKAGEVVVAFPAALLST  
 GSALVTAGLAPAEMVVATVTSNGMVKFGSTGSTPPVSPTPERSLLSTGDENSTPGDAFGEMVTSPLTQL  
 TLQASPLQIVKEEGARAASCCLSPGARAELEGLDKDQMLQEKDKQIEELTRMLQQKQQLVELLRLEQQ  
 KRAQQPAPASSPVKRESGFSSCQLSCQPQGSAAHAFGSLVVPNTNHGDTQAPAPESPPVVVKQEAGPPEP  
 DLAPSSQLLLGSQGSFLKRVSPPTLVTDSGTGHLILVTNKSADGGLPAGSPQQPLSQPGSPAGPPA  
 QMDLEHPPQPPFATPTSLKKEPPGYEETVTQPKQEQENGSSSQHMDDLFDILIQSGEISADFKPPSLP  
 GKEKSPAAAAYGPPLTPQPSLSELPQAAPPGSPTLPGRLEDFLESSTGLPLLTSGHEGPEPLSIDD  
 LHSQMLSSAILDHPPSPMDTSELHFAPEPSSGMGLDLAVGHLDSDMWLELSSGGPVLSLAPLSTAAPSL  
 FSDMFLDGHDLQLHWDSC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

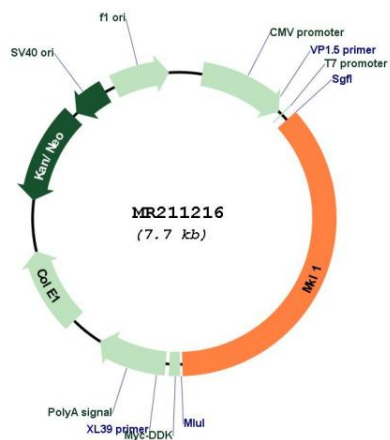


ACCN: NM\_001082536

ORF Size: 2787 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001082536.1</a> , <a href="#">NP_001076005.1</a>
<b>RefSeq Size:</b>	4366 bp
<b>RefSeq ORF:</b>	2790 bp
<b>Locus ID:</b>	223701
<b>UniProt ID:</b>	<a href="#">Q8K4J6</a>
<b>Cytogenetics:</b>	15 E1
<b>MW:</b>	98.9 kDa
<b>Gene Summary:</b>	Transcription coactivator that associates with the serum response factor (SRF) transcription factor to control expression of genes regulating the cytoskeleton during development, morphogenesis and cell migration (PubMed:12019265, PubMed:12732141, PubMed:17588931, PubMed:19350017, PubMed:24732378). The SRF-MRTFA complex activity responds to Rho GTPase-induced changes in cellular globular actin (G-actin) concentration, thereby coupling cytoskeletal gene expression to cytoskeletal dynamics (PubMed:24732378). MRTFA binds G-actin via its RPEL repeats, regulating activity of the MRTFA-SRF complex (PubMed:12732141, PubMed:17588931). Activity is also regulated by filamentous actin (F-actin) in the nucleus (PubMed:23558171, PubMed:25759381).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211216