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Product datasheet for MG211216

Mkl1 (NM_001082536) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mkl1 (NM_001082536) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mkl1
Synonyms:	AMKL; Bsac; Mal; Mrtf-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>MG211216 representing NM_001082536
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGCCTTTGAAAAGCCCCGCTGCATTTCATGAGCAGAGAAGAAGCCTGGAGCGGGCCAGGACCGAGG
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TTCTCGATGGACTTCCTGGATGGACACGACTTGCAGCTCCACTGGGATTCCTGCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211216 representing NM_001082536
Red=Cloning site Green=Tags(s)

MPPLKSPAAFHEQRRSLERARTEDYLKRKIRSRPERAELVRMHILEETSAEPSLQAKQLKLKRARLADDL
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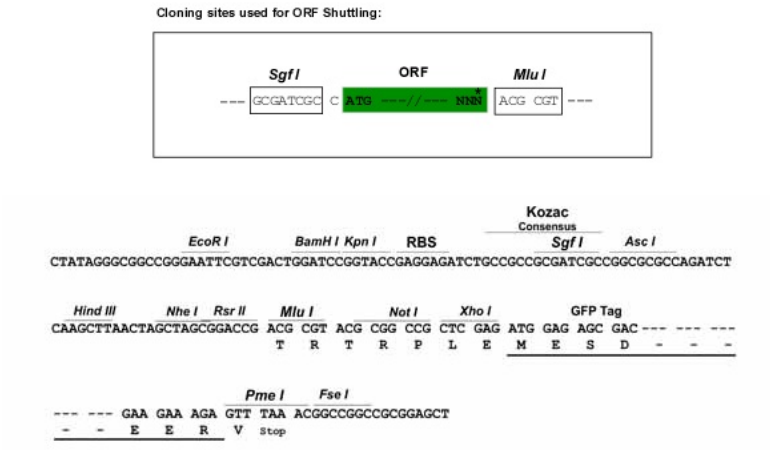
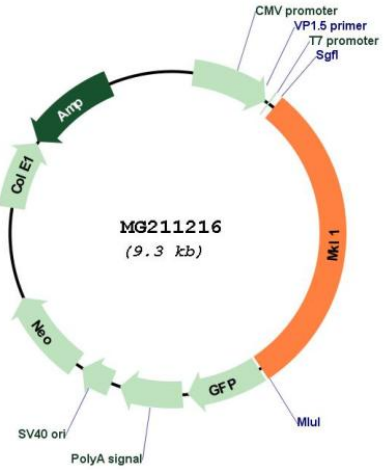
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001082536
ORF Size:	2787 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_001082536.1, NP_001076005.1
RefSeq Size:	4366 bp
RefSeq ORF:	2790 bp
Locus ID:	223701
UniProt ID:	Q8K4J6
Cytogenetics:	15 E1

Gene Summary: 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]