

Product datasheet for **MC222284**

Mical3 (NM_153396) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mical3 (NM_153396) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mical3
Synonyms:	C130040D16Rik; Mical-3; mKIAA1364
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>MC222284 representing NM_153396
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGAGGAGAGGAAGCAGGAGACAACGAACCAAGCTCAGTCCTCTTTGACCGCTTTGTCCAGGCCACCA
 CCTGCAAGGGGACCCTCAGGGCCTTCCAAGAGCTCTGTGACCACCTGGAGCTGAAGCCCAAGGACTACCG
 GTCCTTCTACCACAAGCTCAAGTCCAAGCTCAACTACTGGAAGGCCAAAGCCCTCTGGGCCAAATTGGAC
 AAGCGGGCAGTCACAAAGACTACAAAAAGGGCAAAGCCTGCACCAACACAAAGTGTCTCATCTTTGGAG
 CTGGCCCTCTGGGCTGCGCACAGCCATCGACTTGTCTTGTGGGAGCCAAGGTGGTTGTTATTGAAAA
 GCGAGATGCCTTCTCCGCAACAATGTCTTACATCTCTGGCCCTTACCATACACGATCTCCGAGGCCTG
 GGTGCCAAGAAATCTACGGCAAGTTCTGTGCCGAGCCATCGACCATATCAGTATCCGTCAGCTCCAGC
 TAATCCTCTTGAAGGTAGCCTTGATCTTGGCATTGAGATCCATGTCAATGTGGAATTCAGGACTTGT
 TCAGCCTCCCGAGGACCAAGAGAATGAACGGATAGGATGGCGAGCATTGGTGCACCCCAAACTCATCCT
 GTATCAGAATATGAATTTGAAGTTATCATCGGTGGAGATGGGCGTAGGAACACCTTGAAGGATTTTCGTC
 GAAAAGAATTTCTGGCAAGCTAGCCATTGCCATTACAGCAAATTTATCAACCGCAACACAACCGCAGA
 GGCCAAAGTGGAGGAGATTAGTGGCGTGGCTTTTATATTCAACCAAAATTTTCCAGGAGCTGAGAGAA
 GCCACAGGTATTGACTTAGAGAACATCGTCTACTACAAAGATGACACACACTACTTTGTCATGACGGCCA
 AAAAGCAGAGTTTGTGGACAAGGGGTGATCTGCATGACTACACAGACACGGAGCTGTTGCTTTCCCG
 GGAGAACGTGGACAGGAGGCCCTGTGAACTATGCCCGGAGGCCGAGACTTCTTACCCAGCAGCAG
 CTGCCTTCTCTGGATTTGCCATCAATCACTACGGGCAGCCAGACGTGGCCATGTTTGACTTTACCTGCA
 TGTACGCCTCTGAAAATGCCGCTTGGTCCGGGAACAGAACGGACACAGTTACTAGTAGCTTTGGTTGG
 AGACAGCCTCCTGGAGCCTTTCTGGCCAATGGGACAGGAATAGCCCGGGGCTTTCTGGCTGCTATGGAC
 TCTGCCTGGATGGTACGAAGCTGGTCTCTGGGCACCGCCCTTGAAGTCTGGCAGAAAGGGAAGCA
 TTTATAGTTTGTGCCTCAGACCACCCCTGAGAACGTGAGCAAAACTTACGCCAATATAGCATCGACCC
 TGTCACTAGGTATCCCAATATCAACATCAACTTCTCAGGCCAAGCCAGGTGCGCCATTTATACGATAGC
 GGAGAAACAAAGATATCCACCTGGAAATGGAGAACATGGTGAATCCCCGAACCACTCCCAAGCTGACTC
 GCAACGAGTCTGTAGCTCGTTCAAGCAAACTGCTGGGTGGTGCCAAAGGCAGACAGAAGGCTATTGAG
 AGTCAATGTGACAGATCTCACTATGTCTTGGAAAAGTGGCCTGGCCCTGTGTGCGATCATCCACAGATAC
 CGCCCCGATCTAATAGACTTTGATTCTTTGGATGAGCAAAACGTGGAGAAGAATAATCAGCTGGCCTTTG
 ACATCGCTGAGAAGGAAGTGGGTATCTCTCCCATCATGACGGGCAAGGAGATGGCTTCGGTTCGGGGAGCC
 AGACAAGCTGTCCATGGTGTGTACCTACGCAGTTCTACGAGATGTTCAAGGACTCGCTCTCCTCCAGC
 GACACCTCGACCTGAATGCAGAGGAGAAAGCCGTCTGATAGCCAGCACCAATCCCCCATCTCCTTCC
 TGAGCAAACTCGGACAGACCATCTCTCGGAAGCGTTCCGCCAAGGATAAAAAAGAAAAGGACTCAGATGG
 GGCTGGAAAGAGGAGAAAAACAGTCAGTCAGAGGAGGAGGAGCCTCCCGGAGCTACAAAGGAGAAAGA
 CCGACCTGGTGAGCACCTGACGGACAGACGGATGGATGCTGCCGTTGGGAACCAAGCAAAAGTGAAGT
 ACATGGCGACCCAGCTGCTGGCCAAGTTTGAAGAGAACGCACCTGCTCAGTCCACTGGTGTGAGGAGACA
 GGGCTCCATAAAGAAAGAGTTCCCGCAGAACTTGGGGGCGAGCAGACAGTCTATTCTGCCAAAAGCGG
 GTCTACGTGATGGAGAGGCTGAGCGCCGAGGGCAAGTTCTTCCATCGAAGCTGCTTCAAGTGTGAGTACT
 GTGCCACCACGCTGCGCCTATCAGCCTACGCCTACGACATCGAGGATGAGTTCTCTCCAACTTCTGGAC
 ATCAGCCAGCTACCATGTTCCAGTTGCCCTTCTGCTACGGTCATGCCTATGTGCCTTCTGTACCATCCA
 TCTCAAGTGTCTGCTGCTCGAGGGAGGCCAGCATTATGTCACCAAGTGTATTCAATGACACCAACA
 GTTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_153396

Insert Size:

2595 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_153396.3 , NP_700445.2
RefSeq Size:	2929 bp
RefSeq ORF:	2595 bp
Locus ID:	194401
UniProt ID:	Q8CJ19
Cytogenetics:	6 F1
Gene Summary:	Monooxygenase that promotes depolymerization of F-actin by mediating oxidation of specific methionine residues on actin to form methionine-sulfoxide, resulting in actin filament disassembly and preventing repolymerization. In the absence of actin, it also functions as a NADPH oxidase producing H₂O₂. Seems to act as Rab effector protein and play a role in vesicle trafficking. Involved in exocytic vesicles tethering and fusion: the monooxygenase activity is required for this process and implicates RAB8A associated with exocytotic vesicles. Required for cytokinesis. Contributes to stabilization and/or maturation of the intercellular bridge independently of its monooxygenase activity. Promotes recruitment of Rab8 and ERC1 to the intercellular bridge, and together these proteins are proposed to function in timely abscission.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) differs in the 5' UTR, lacks several 3' exons and includes an alternate 3' exon. The encoded isoform (2) has a distinct and shorter C-terminus compared to isoform 1.