

Product datasheet for **MC229691**

Mical3 (NM_001270475) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mical3 (NM_001270475) Mouse Untagged Clone
Tag: Tag Free
Symbol: Mical3
Synonyms: C130040D16Rik; Mical-3; mKIAA1364
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229691 representing NM_001270475
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGAGGAGAGGAAGCAGGAGACAACGAACCAAGCTCACGTCCTCTTTGACCGCTTTGTCCAGGCCACCA
CCTGCAAGGGGACCCTCAGGGCCTTCCAAGAGCTCTGTGACCACCTGGAGCTGAAGCCCAAGGACTACCG
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 CTGCTCGAAGCCAATATCCCTAAAGTCTACTCAGTTGACAAGTCACTCAGGATGAGGGTCTCTGCT
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CAAGTCCCTGTGAAATCTGTCTTCTCTGGGTACAAGAAGGACAAGAAGAAAAGAGCGACGAGAAATCG
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 CGAGGGGAGCTTTCAGAGGAGAAGAAGATCCTGAACGAGATGCTGGAGGTGGTGGAGCAGAGAGACTCG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001270475
- Insert Size:** 5982 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).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001270475.1](#), [NP_001257404.1](#)
- RefSeq Size:** 9448 bp
- RefSeq ORF:** 5982 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 (1) represents the longest transcript and encodes the longer isoform (1).