

Product datasheet for RC208308

MICAL1 (NM_022765) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MICAL1 (NM_022765) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MICAL1
Synonyms: MICAL; MICAL-1; NICAL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC208308 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTTCACCTACCTCCACCAACCCAGCGCATGCCACTTTGAGAGCTTCCTGCAGGCCAGCTGTGCC
 AGGACGTGCTGAGCAGCTTCCAGGAGCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGGCTGCCCA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

>RC208308 protein sequence
Red=Cloning site Green=Tags(s)

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MASPTSTNPAHAHFESFLQAQLCQDVLSSFQELCGALGLEPGGLPQYHKIKDQLNYWSAKSLWTKLDR
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6204_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022765

ORF Size: 3201 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_022765.4](#)

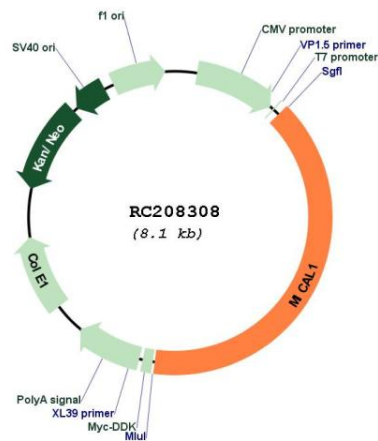
RefSeq Size: 3661 bp

RefSeq ORF: 3204 bp

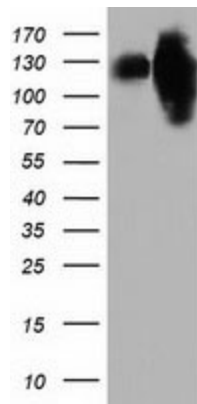
Locus ID: 64780
UniProt ID: [Q8TDZ2](#)
Cytogenetics: 6q21
Domains: CH, LIM
MW: 117.9 kDa

Gene Summary: This gene encodes an enzyme that oxidizes methionine residues on actin, thereby promoting depolymerization of actin filaments. This protein interacts with and regulates signalling by NEDD9/CAS-L (neural precursor cell expressed, developmentally down-regulated 9). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]

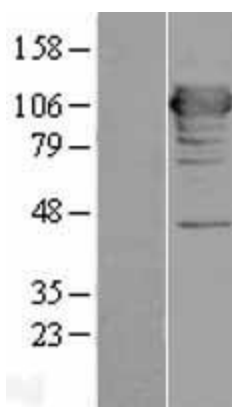
Product images:



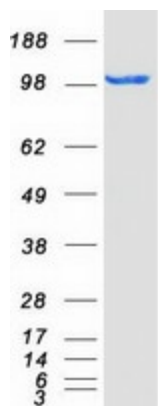
Circular map for RC208308



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MICAL1 (Cat# RC208308, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MICAL1 (Cat# [TA501893]). Positive lysates [LY402940] (100ug) and [LC402940] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402940]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208308 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MICAL1 protein (Cat# [TP308308]). The protein was produced from HEK293T cells transfected with MICAL1 cDNA clone (Cat# RC208308) using MegaTran 2.0 (Cat# [TT210002]).