

Product datasheet for SC319884

MICAL1 (NM_022765) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: MICAL1 (NM_022765) Human Untagged Clone
Tag: Tag Free
Symbol: MICAL1
Synonyms: MICAL; MICAL-1; NICAL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_022765.2
 CCACACTCGCGCGACTCCAGGCGCACGCCCGGGCCGCCCGCATCCCAGCATCCCCG
 CCGATCTCGGCGTTTCCGCCCGCCCCGCCCGCCCTCCCACCCGCTCAGACCTGGT
 TGCCAGCCCAACAGGAAGCGGCCCTCCCGGCTTCGGAGCCGCCGCACTCATCTGCC
 CAGCTGCTGCCCTCCCCAGGAGGCTCCATGGCTTACCTACCTCCACCAACCCAGCGCA
 TGCCCACTTTGAGAGTTCTGCAGGCCAGCTGTGCCAGGACGTGCTGAGCAGTTCCA
 GGAGCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGCTGCCCAAGTACCACAAGAT
 CAAGGACCAGCTCAACTACTGGAGCGCCAAGTCACTGTGGACCAAGCTGGACAAGCGAGC
 AGGCCAGCTGTCTACCAGCAGGGCCGGGCTGCACCAGCACAAGTGCCTGGTGGTGGG
 TGCTGGACCTTGGGGCTGCGGGTGCCTGTGGAGCTGGCGCTGCTGGGGCCCGAGTGGT
 GCTGGTGGAAAAGCGCACCAAGTTCTCTGCCACAACGTGCTCCACCTCTGGCCCTTAC
 CATCCACGACCTGCGGGCACTCGGTGCTAAGAAGTTCTACGGGGCGTTCTGCACCGGCAC
 CCTGGACCACATCAGCATCAGGCAGCTCCAGCTGCTTCTGCTGAAGGTAGCATTGCTGCT
 GGGGGTGGAAATCACTGGGGTGTCACTTTCACTGGCCTCCAGCCCCCTCTAGGAAGGG
 GAGTGGCTGGCGTGCCAGCTCCAACCCAACCCCTGCCAGCTGGCCAATATGAATT
 TGACGTCCTTATCTCGGCTGCAGGAGGTAATTCGTCCCTGAAGGCTTCAAAGTTCGAGA
 AATGCGAGGCAAATGGCCATTGGCATCACAGCCAATTTGTGAATGGACGCACCGTGGGA
 GGAGACACAGGTGCCGGAGATCAGTGGTGTAGCCAGGATCTACAACCAGAGCTTCTTCCA
 GAGCCTTCTCAAAGCCACAGGCATTGATCTGGAGAACATTGTGTACTACAAGGACGACAC
 CCACTACTTTGTGATGACAGCCAAGAAGCAGTGCCTGCTGCGGCTGGGGGTGCTGCGCCA
 GGACTGGCCAGACCAATCGGCTGCTGGGCAAGTCCAATGTGGTGGCCGAGGCTCTGCA
 GCGCTTTACCCGGGAGCTGCTGACTTTGCCACCCATGGCAAGCTCGGGAACTAGAGTT
 TGCCAGGATGCCATGGGCAGCCTGATGTCTCTGCTTTGACTTACAGGATGATGCG
 GGCAGAGATTCTGCTCGTGTGCAAGAGAAGCATGGCGCCCGCTGCTGCTGGGACTGGT
 GGGGGACTGCCTGGTGGAGCCCTTCTGGCCCTGGGCACTGGAGTGGCACGGGGTCTCT
 GGCAGCCTTTGATGCAGCCTGGATGGTGAAGCGGTGGGAGAGGGCGCTGAGTCCCTAGA
 GGTGTTGGCTGAGCGTGAGAGCCTGTACCAGCTTCTGTACAGACATCCCAGAAAACAT



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GCATCGCAATGTGGCCAGTATGGGCTGGACCCAGCCACCCGCTACCCCAACCTGAACCT
CCGGGCAGTGACCCCAATCAGGTACGAGACCTGTATGATGTGCTAGCCAAGGAGCCTGT
GCAGAGGAACAACGACAAGACAGATACAGGGATGCCAGCCACCGGTCCGGCAGGCACCCA
GGAGGAGCTGCTACGCTGGTGCCAGGAGCAGACAGCTGGGTACCCGGGAGTCCACGTCTC
CGATTTGTCTTCTCCTGGGCTGATGGGCTAGCTCTGTGTGCCCTGGTGTACCGGCTGCA
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GGCACTAAAGGTGGCAGAGAATGAGCTGGGCATCACACCGGTGGTGTCTGCACAGGCCCT
GGTAGCAGGGAGTGACCCACTGGGCCTCATTGCCTACCTCAGCCACTTCCACAGTGCCTT
CAAGAGCATGGCCACAGCCAGGCCCTGTAGCCAGGCCCTCCCAAGGGACCTCCAGTGC
TGTATTATTCCTTAGTAACTTCAGAGGACCCTGCAGCGATCCCGGGCCAAGGAAAATGC
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GGTGCCACCTGACCCAGAGCCTGGTGTACCCCTGACACCCCATCCCAACACCAGGAGGC
CGGTGCTGGGGACCTGTGTGCACCTTGTGGGAACACCTATATGCTGGAACGCCTCTG
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GTGGCCAGGTGGTACGAGCAGCACCCAGGAGATGGACATTTCTACTGCCTCCAGCACCT
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CACACCAAGTGAGAATAGCATGCCACCAGGCCTCTCAACTCCCACAGCCTCGCAGGAGGG
GGCCGGTCTGTTCAGATCCCAGCCAGCCACCCGTCGGCAGATCCGCCTCTCCAGCCC
GGAGCGCCAGCGTTGTCTCCCTAACCTTACCCTGACCCGGAATGGAGCCTCCACC
CAAGCCTCCCCGAGCTGCTCCGCTTGGCCCGCCAGCCCTGGAGAGCAGCTTTGTGGG
CTGGGGCTGCCAGTCCAGAGCCCTCAAGCTCTTGTGGCCATGGAGAAGGAGGAAAAGA
GAGTCCCTTCTCCAGTGAAGAGGAAGAAGAAGATGTGCCTTTGGACTCAGATGTGGAACA
GGCCCTGCAGACCTTGGCAAGACCTCAGGCACCATGAATAACTACCCAACATGGCGTCCG
GACTCTGCTGCGCGTGCGAAGGAGGAGATGAAGAGGTTCTGCAAGGCCAGACCAT
CCAACGGCGACTAAATGAGATTGAGGCTGCCTTGAAGGAGCTAGAGGCCGAGGGCGTGA
GCTGGAGCTGGCCTTGAAGCGCCAGAGCAGTTCCCAGAACAGCAAAAAGAAAATATGGGT
AGGACAGCTGCTACAGCTCGTTGACAAGAAAACAGCCTGGTGGCTGAGGAGGCCGAGCT
CATGATCACGGTGCAGGAATTGAATCTGGAGGAGAAAACAGTGGCAGCTGGACCAGGAGCT
ACGAGGCTACATGAACCGGAAGAAAACCTAAAGACAGCTGCTGATCGGCAGGCTGAGGA
CCAGTCTGAGGAAGCTGGTGGATTTGGTCAACCAGAGAGATGCCCTCATCCGTTCCA
GGAGGAGCGCAGGCTCAGCGAGCTGGCCTTGGGGACAGGGGCCAGGGCTAGACGAGGGT
GGGCCGTCTGCTTTCGTTCCACAAAGAAAGCACCTCACCCAGCACAGTCCACCCCTG
TTCATCTGGGCTGCCTGGCAGAGAGCCTTGTGTTACAATTAATGTTTCTGCCACAA
AAAAAAAAAAAAAAAAAAAA
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- Restriction Sites:** Please inquire
- ACCN:** NM_022765
- 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:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_022765.2](#), [NP_073602.2](#)

RefSeq Size: 3697 bp

RefSeq ORF: 3204 bp

Locus ID: 64780

UniProt ID: [Q8TDZ2](#)

Cytogenetics: 6q21

Domains: CH, LIM

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]
Transcript Variant: This variant (1) contains an alternate 5' exon and thus differs in its 5' UTR and initiates translation at a downstream in-frame start codon, compared to variant 3. The encoded isoform (1, also known as MICAL-1a) is shorter at the N-terminus, compared to isoform 3.