

## Product datasheet for **SC327685**

### **MICAL1 (NM\_001159291) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MICAL1 (NM_001159291) Human Untagged Clone
Tag:	Tag Free
Symbol:	MICAL1
Synonyms:	MICAL; MICAL-1; NICAL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



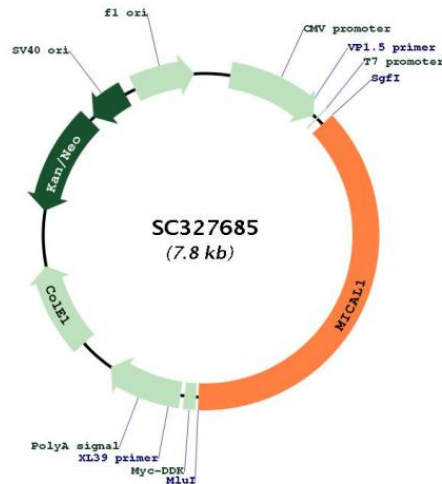
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**Fully Sequenced ORF:** >SC327685 representing NM\_001159291.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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CAGGACGTGCTGAGCAGCTTCCAGGAGCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGCTGCC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001159291

**Insert Size:** 2946 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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 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\\_001159291.1](#)

RefSeq Size: 3403 bp

RefSeq ORF: 2946 bp

Locus ID: 64780

UniProt ID: [Q8TDZ2](#)

Cytogenetics: 6q21

MW: 108.6 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]  
Transcript Variant: This variant (2) contains an alternate 5' exon and thus differs in its 5' UTR and initiates translation at a downstream in-frame start codon, and it lacks an alternate in-frame exon in the central coding region, compared to variant 3. The encoded isoform (2, also known as MICAL-1b) is shorter at the N-terminus, compared to isoform 3.