

## Product datasheet for **RC227278**

### MEMO1 (NM\_001137602) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MEMO1 (NM\_001137602) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MEMO1  
**Synonyms:** C2orf4; CGI-27; MEMO; NS5ATP7  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC227278 representing NM\_001137602  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTCCAACCGAGTGGTCTGCCGAGAAGCCAGTCACGCCGGGAGCTGGTACACAGCCTCAGGACCGCAGC  
TGAATGCACAGCTAGAAGGTTGGCTTTCACAAGTACAGTCTACAAAAGACCTGCTAGAGCCATTATTGC  
CCCCGGAGAATTTTCATCCTTGGGCTTCTCATCATGTGCCCTCTCTCGATGTGCACCTTCCAGTGTG  
GATATATATAGGACACCTCTGTATGACCTTCGTATTGACCAAAAGATTTACGGAGAAGTGTGAAGACAG  
GAATGTTTGAACGCATGTCTCTGCAGACAGATGAAGATGAACACAGTATTGAAATGCATTTGCCTTATAC  
AGCTAAAGCCATGGAAAGCCATAAGGATGAGTTTACCATTATTCCTGACTGGTTGGAGCTCTGAGTGAG  
TCAAAAGAAGCAGGAATTCGGAAAACCTTCAGTAAATATCTAGCGGATCCTAGTAATCTCTTTGGTGT  
CTTCTGATTTCTGCCATTGGGGTCAAAGGTTCCGTTACAGTACTATGATGAATCCAGGGGGAGATTTA  
TAGATCCATTGAACATCTAGATAAAATGGGTATGAGTATTATAGAACAATTAGACCCTGTATCTTTAGC  
AATTACTTGAAGAAATACCATAACTATATGTGGAAGACATCCCATTGGGGTGTATTAATGCTATCA  
CAGAGCTCCAGAAGAATGGAATGAATATGAGTTTTTCGTTTTTGAATTATGCCAGTCGAGCCAGTGTAG  
AACTGGCAAGACAGTTCAGTGAGTTATGCAGCTGGAGCACTCACGGTCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC227278 representing NM\_001137602  
Red=Cloning site Green=Tags(s)

MSNRVVCREASHAGSWYTASGPQLNAQLEGWLSQVQSTKRPARAIIAPRRIFILGPSHHVPLSRCALSSV  
 DIYRTPLYDLRIDQKIYGELWKTGMFERMSLQTDEDEHSIEMHLPYAKAMESHKDEFTIIPVLVGALSE  
 SKEQEFGKLF SKYLADPSNLFVVSDFCHWGQRF RYSYDDESQGEIYRSIEHLDKMGMSIIEQLDPVSFS  
 NYLKKYHNTICGRHPIGVLLNAITELQKNGMNSFSFLNYAQSSQCRNWQDSSVSYAAGALTVH

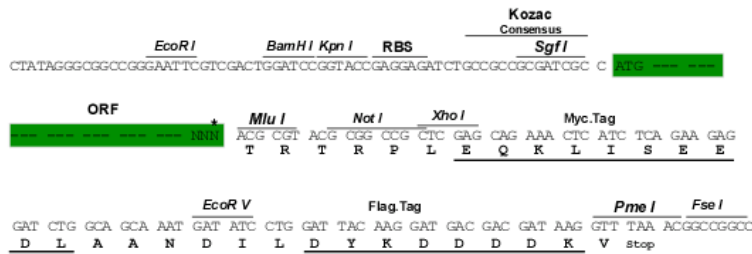
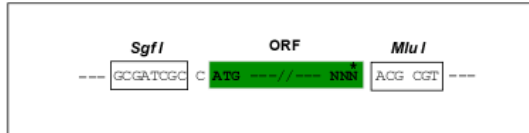
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8048\\_f04.zip](https://cdn.origene.com/chromatograms/mk8048_f04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001137602

**ORF Size:** 822 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.

**RefSeq:** [NM\\_001137602.3](#)

**RefSeq ORF:** 825 bp

**Locus ID:** 51072

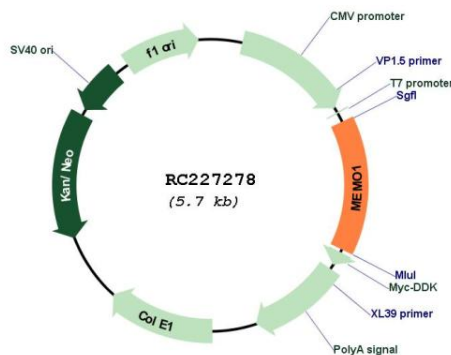
**UniProt ID:** [Q9Y316](#)

**Cytogenetics:** 2p22.3

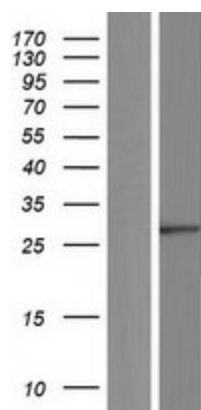
**MW:** 31.1 kDa

**Gene Summary:** May control cell migration by relaying extracellular chemotactic signals to the microtubule cytoskeleton. Mediator of ERBB2 signaling. The MEMO1-RHOA-DIAPH1 signaling pathway plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. It controls the localization of APC and CLASP2 to the cell membrane, via the regulation of GSK3B activity. In turn, membrane-bound APC allows the localization of the MACF1 to the cell membrane, which is required for microtubule capture and stabilization. Is required for breast carcinoma cell migration.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC227278



Western blot validation of overexpression lysate (Cat# [LY427942]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227278 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).