

## Product datasheet for RC236525

### MEMO1 (NM\_001301852) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MEMO1 (NM\_001301852) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MEMO1  
**Synonyms:** C2orf4; CGI-27; MEMO; NS5ATP7  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC236525 representing NM\_001301852  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGGATATACGACTGTGGGTCTTGTGCTGCCATGCTTATAAACAAGTGGATCCGCTATTACCCG  
GAGAATTTTCATCCTTGGCCTTCTCATCATGTGCCCTCTCGATGTGCATTTCCAGTGTGGATATA  
TATAGGACACCTCTGTATGACCTTCGTATTGACAAAAGATTTACGGAGAAGTGTGAAGACAGGAATGT  
TTGAACGCATGTCTCTGCAGACAGATGAAGATGAACACAGTATTGAAATGCATTTGCCTTATACAGCTAA  
AGCCATGGAAAGGTCAAAGGTTCCGTTACAGTTACTATGATGAATCCCAGGGGGAGATTTATAGATCCAT  
TGAACATCTAGATAAAATGGGTATGAGTATTATAGAACAATTAGACCCTGTATCTTTAGCAATTACTTG  
AAGAAATACCATAATACTATATGTGGAAGACATCCCATTTGGGGTGTATTAATGCTATCACAGAGCTCC  
AGAAGAATGGAATGAATATGAGTTTTTCGTTTTGAATTATGCCAGTCGAGCCAGTGTAGAAATGGCA  
AGACAGTTCAGTGAGTTATGCAGCTGGAGCACTCACGGTCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC236525 representing NM\_001301852  
Red=Cloning site Green=Tags(s)

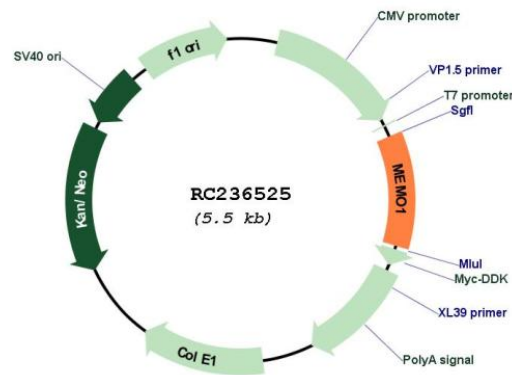
MQDIRTVGLVLPMLINKWIRLLPGEFSSLGLLIMCPSLDVHFPVWIYIGHLCMTFVLTKRFTENCGRQEC  
LNAACLROQMKMNTVLKCIQLKPKWQRFQFRYSYYDESQGEIYRSIEHLDKMGMSIIEQLDPVFSFNYL  
KKYHNTICGRHPIGVLLNAITELQKNGMNMSFSLNYAQSSQCRNWQDSSVSYAAGALTVH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001301852

**ORF Size:** 603 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\\_001301852.3](#)

**RefSeq Size:** 1368 bp

**RefSeq ORF:** 606 bp

**Locus ID:** 51072

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

**Cytogenetics:** 2p22.3

**MW:** 23.7 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]