

## Product datasheet for **RC208004**

### AMIGO2 (NM\_181847) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AMIGO2 (NM_181847) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AMIGO2
Synonyms:	ALI1; AMIGO-2; DEGA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC208004 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCGTTACGTGTACACTCTGCCACCTGCTTGGAGCCGTCGTAGACCGGGCTGCAGGGAGCTGC  
 TGTGTTTGGCTGATGATCACAGTACTGTGGCCCTGGTGCTCTGGGGTGTGCCACCCTGGCATCTG  
 TGCCACTGACATCGTCAGCTGCACCAACAAAACTGTCCAAGGTGCTGGGAACCTTTTCAGACTGATT  
 AAGAGACTGGACCTGAGTTATAACAGAATTGGGCTTCTGGATTCTGAGTGGATTCCAGTATCGTTTGCAA  
 AGCTGAACACCCTAATTCTTCGCATAACAACATCACCAGCATTCCACGGGCAGTTTTCCACAACCTCC  
 AAATTTGAAGTGTCTTGACTTATCGTCCAATAAGCTGAAGACGGTGAAAAATGCTGTATTCCAAGAGTTG  
 AAGTTCTGGAAGTGTCTGCTTTACAACAATCACATATCCTATCTCGATCCTTCAGCGTTTGGAGGGC  
 TCTCCAGTTGCAGAACTCTACTTAAGTGAAATTTCTCACACAGTTCCGATGGATTGTATGTTGG  
 AAGTTCAAGCTGGCAGAACTGATGTTTTAGATGTTTCTATAACCGAATTCCTCCATGCCAATGCAC  
 CACATAAATTTAGTGCCAGGAAAACAGCTGAGAGGCATCTACCTTCATGGAAACCAATTTGTCTGTGACT  
 GTTCCCTGACTCCTTGCTGGTCTTTGGTATCGTAGGCACTTTAGCTCAGTGTGGATTTAAGAACGA  
 TTACACCTGTCGCCTGTGGTCTGACTCCAGGCACTCGCGTCAGGTAATCTGCTCCAGGATAGCTTTATG  
 AATTGCTCTGACAGCATCAATGGTTCCTTCGTGCGCTTGGCTTTATTCATGAGGCTCAGGTCGGGG  
 AAAGACTGATGGTCCACTGTGACAGCAAGACAGGTAATGCAAATACGGATTTTCATCTGGTGGTCCAGA  
 TAACAGACTGCTAGAGCCGGATAAAGAGATGGAAAACCTTTACGTGTTTCAATGGAAGTCTGGTTATA  
 GAAAGCCCTCGTTTTGAGGATGCTGGAGTGTATCTTGTATCGCAATGAATAAGCAACGCCTGTTAAATG  
 AAAGTGGGACGTCACAATAAATGTGAGCAATTCAGTGAAGCAGATCCCATGTCATGAGGCATTAA  
 CACAGCTTTTACCACTCTTGTGCTTGGCTGGCCAGTATCGTTTTGGTACTTTTGTACCTCTATCTGACT  
 CCATGCCCTGCAAGTGTAAAACCAAGAGACAGAAAAATATGCTACACCAAGCAATGCCATTCATCGA  
 TTCTCAGTCTGGCCCTGCTAGTGATGCCTCCGCTGATGAACGGAAGGCAGGTGCAGGTAAGAGTGGT  
 GTTTTTGGAACCCCTGAAGGATACTGCAGCAGGGCAGAACGGGAAAGTCAGGCTCTTTCCAGCGAGGCA  
 GTGATAGCTGAGGGCATCCTAAGTCCACGAGGGGAAATCTGACTCAGATTCAATTCAGTGT  
 CTGACACACCTTTTGTGGCTCCACT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC208004 protein sequence  
 Red=Cloning site Green=Tags(s)

MSLRVHTLPTLLGAVVRPGCRELLCLLMIIVTVGPGASGVCPTACICATDIVSCTNKNLSKVPGNLFRLI  
 KRLDLSYNRIGLLDSEWIPVSFAKLNTLILRHNNITISISTGSFSTPNLKCLDLSSNKLKTKVNAVFQEL  
 KVLEVLLLNNHISYLDPSAFGGLSQLQKLYLSGNFLTQFPMDLYVGRFKLAELMFLDVSYNRIPSPMPH  
 HINLVPKQLRGIYHGNPFVDCSLYSLLVFYRRHFSSVMDFKNDYTCRLWSDSRHSRQVLLQLDSFM  
 NCSDSIINGSFRALGFIHEAQVGERLMVHCDSTGNANTDFIIVGPDNRLLLEPKEMENFYVFNHSLVI  
 ESPRFEDAGVYSIAMNKQRLNETVDVTINVSNTVSRSHAHEAFNTAFTTLAACVASIVLVLLYLYLT  
 PCPCCKTKRQKNMLHQSNHSSILSPGPASDASADERKAGAGKRVVFLLEPLKDTAAGQNGKVRVLPSEA  
 VIAEGILKSTRGKSDSDSVNSVFSDFPFVAST

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6023\\_g05.zip](https://cdn.origene.com/chromatograms/mk6023_g05.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_181847

**ORF Size:** 1566 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\\_181847.1](#)

**RefSeq Size:** 3849 bp

**RefSeq ORF:** 1569 bp

**Locus ID:** 347902

**UniProt ID:** [Q86SJ2](#)

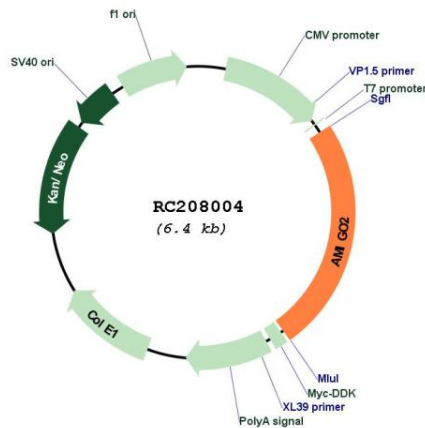
**Cytogenetics:** 12q13.11

**Protein Families:** Druggable Genome, Transmembrane

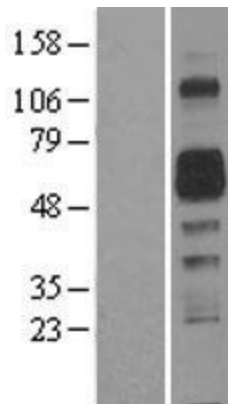
**MW:** 57.9 kDa

**Gene Summary:** Required for depolarization-dependent survival of cultured cerebellar granule neurons. May mediate homophilic as well as heterophilic cell-cell interaction with AMIGO1 or AMIGO3. May contribute to signal transduction through its intracellular domain. May be required for tumorigenesis of a subset of gastric adenocarcinomas.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC208004



Western blot validation of overexpression lysate (Cat# [LY428310]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227654] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).