

## Product datasheet for **RG217981**

### Arp2 (ACTR2) (NM\_001005386) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Arp2 (ACTR2) (NM_001005386) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arp2
Synonyms:	ARP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217981 representing NM_001005386 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACAGCCAGGGCAGGAAGGTGGTGGTGTGCGACAACGGCACCCGGTTTGTGAAGTGTGGATATGCAG  
GCTCTAACTTTCCAGAACACATCTCCAGCTTTGGTTGGAAGACCTATTATCAGATCAACCACCAAAGT  
GGGAAACATTGAAATCAAGAATAACAAAAGATGGATCTTATGGTTGGTATGAGGCAAGTGAATTACGA  
TCAATGTTAGAAGTAACTACCCTATGGAAAATGGCATAGTACGAAATGGGATGACATGAAACACCTGT  
GGGACTACACATTTGGACCAGAGAACTTAATATAGATACCAGAAATGTAATCTTACTCACAGAACC  
TCCTATGAACCAACCAAAAACAGAGAGAAGATTGTAGAGGTAATGTTTGAACCTTACCAGTTTTCCGGT  
GTATATGTAGCCATCCAGGCAGTTCTGACTTTGTACGCTCAAGGTTTATTGACTGGTGTAGTGGTAGACT  
CTGGAGATGGTGTGACTCACATTTGCCAGTATATGAAGGCTTTTCTCTCCCTCATCTTACCAGGAGACT  
GGATATTGCTGGGAGGGATATAACTAGATATCTTATCAAGCTACTTCTGTTGCGAGGATACGCCTCAAC  
CACTCTGCTGATTTTGAACGGTTCGCATGATTAAGAAAAACTGTGTTACGTGGGATATAATATTGAGC  
AAGAGCAGAACTGGCCTTAGAAACCACAGTATTAGTTGAATCTTATACACTCCCAGATGGACGTATCAT  
CAAAGTTGGGGGAGAGAGATTTGAAGCACCAGAAGCTTTATTTACGCCTCACTTGATCAATGTTGAAGGA  
GTTGGTGTGCTGAATTGCTTTTAAACAATTCAGGCAGTGACATTGATACCAGATCTGAATTTACA  
AACACATTGTGCTTTCTGGAGGGTCTACTATGTATCCTGCCTGCCATCACGGTTGGAACGAGAACTTAA  
ACAGCTTTACTTAGAACGAGTTTTGAAGGGTGTGTTGAAAAACTTTCTAAATTTAAGATCCGCATTGAA  
GACCCACCCCGCAGAAAGCACATGGTATTCCTGGGTGGTGCAGTTCTAGCGGATATCATGAAAGACAAAG  
ACAACCTTTGGATGACCCGACAAGAGTACCAAGAAAAGGGTGTCCGTGTGCTAGAGAACTTGGTGTGAC  
TGTTCTGA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG217981 representing NM\_001005386  
Red=Cloning site Green=Tags(s)

MDSQGRKVVVCDNGTGFVKCGYAGSNFPEHIFPALVGRPIIRSTTKVGNIEIKNNKKMDLMVGDEASELR  
 SMLEVNYPMENGIVRNWDDMKHLWDYTFGPEKLNIDTRNCKILLTEPPMNPTKNREKIVEVMFETYQFSG  
 VYVAIQAVLTLYAQGLLTVVVVDSGDGVTHICPVYEGFSLPHLTRRLDIAGRDITRYLIKLLLLRGYAFN  
 HSADFETVRMIKEKLCYVGYNIEQEQLALETTVLVESYTLPDGRIKVGGERFEAPEALFQPHLINVEG  
 VGVAEALLFNTIQAADIDTRSEFYKHIVLSGGSTMYPLPSRLERELKQLYLERVLKGDVEKLSKFKIRIE  
 DPPRRKHMVFLGGAVLADIMKDKDNFWMTRQEYQEKGVRVLEKLGVTVR

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001005386

**ORF Size:** 1197 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\\_001005386.2](#)

**RefSeq Size:** 3878 bp

**RefSeq ORF:** 1200 bp

**Locus ID:** 10097

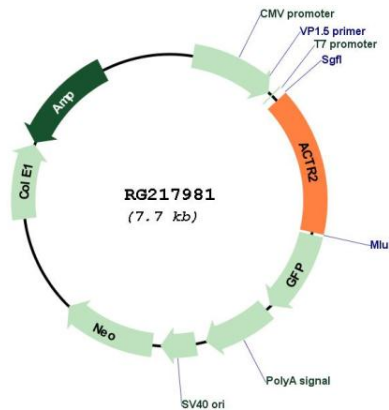
**UniProt ID:** [P61160](#)

**Cytogenetics:** 2p14

**Protein Families:** Druggable Genome

**Gene Summary:** The specific function of this gene has not yet been determined; however, the protein it encodes is known to be a major constituent of the ARP2/3 complex. This complex is located at the cell surface and is essential to cell shape and motility through lamellipodial actin assembly and protrusion. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG217981