

## Product datasheet for **SC303772**

### ARFGEF2 (NM\_006420) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ARFGEF2 (NM\_006420) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** ARFGEF2  
**Synonyms:** BIG2; dj1164i10.1; PVNH2  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL4  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_006420 edited  
 ATGCAGGAGAGCCAGACCAAGAGCATGTTTCGTGTCCCGGGCCCTGGAGAAGATCCTAGCC  
 GACAAGGAGGTGAAGCGGCCCCAGCACTCCAGCTGCGCAGGGCCTGCCAGGTGGCGCTC  
 GATGAAATTAAAGCAGAAATAGAAAAGCAGAGGCTTGGCACTGCTGCACCACCAAAGGCA  
 AACTTCATTGAAGCTGACAAGTATTTTCTCCATTTCGAGCTAGCTTGCCAGTCCAAGTCC  
 CCAAGGGTAGTCAGCACATCCCTTGACTGCTTGCAGAACTCATCGCATACGGGCACATC  
 ACTGGCAACGCCCTGACAGTGGAGCCCTGGGAAGCGGCTGATCGACAGAATTGTTGAA  
 ACCATTTGCAGTTGTTTTAGGGCCCTCAGACTGATGAAGGGTTCAGTTACAAATAATT  
 AAGGCTCTTCTGACTGCACTGACTTCCCCACACATTGAAATTCATGAGGGTACTATCCTG  
 CAGACAGTGAGAACATGTTACAATATCTATTTGGCCAGCAAAAATCTCATCAATCAAACC  
 ACTGCCAAGGCTACCCTTACTCAGATGCTGAACGTCATTTTCACCCGCATGGAAAACCAA  
 GTGTTGCAGGAGGCCAGAGAAGTGGAAAACCAATCCAGTCAAAAACCCAGTCCCCTGTG  
 ATCCAAGCTGCAGCAGTATCCCCAAAGTTCGTTTCGTTTGAAGCACAGTCAGGCACAAAGC  
 AAACCAACAACCTCCCGAAAAACAGATTTAACCAACGGTGAACATGCCAGGAGTGATTCT  
 GGAAAAGTAAAGCAGAAAAATGGAGACGCCACCCAGAGAAAAGAGGCTCATCACTGTCAGGG  
 ACTGATGACGGAGCCAGGAGGTGGTGAAGGACATCTTGGAAAGATGTAGTCACATCTGCC  
 ATTAAGAAGCAGCGGAAAAGCATGGTCTGACAGAACCTGAGAGAGTTCTAGGTGAACTG  
 GAGTGCCAGGAATGTGCTATTTCCCGCAGGAGTTGATGAAAACCTCACAGACCAACGGGATA  
 GCCGATGACAGGCAGTCTTGTCTGTCAGCAGATAATCTGGAATCGGATGCACAAGGCAT  
 CAAGTGGCTGCCAGGTTCTCCACGTTCTGCAGAAGGATGCCTTCTCTGTGTTCCGCTCC  
 CTGTGCAAGCTGTCCATGAAACCCCTTGGTGAAGGCCCTCCAGACCCAAAATCCCATGAG  
 CTGCGTTCCAAGGTGGTTTCCCTGCAGCTGCTCCTCTCTGTGTTGCAAAAATGCTGGCCCC  
 GTATTCAGGACTCACGAGATGTTCAATGCAATCAAGCAATATCTCTGTGTCGCTTG  
 TCCAAAACGGCGTCTCTTCACTGCCTGATGTCTTTGAGCTCTCTTGGCATTCTTTCTT  
 ACTCTTCTTTCAAACCTTTAAAATGCACTTGAAAAATGCAGATAGAGGTCTTTTCAAAGAG  
 ATTTTCTGAACATTTTAGAAACATCAACAAGTCTTTTGAAGCACAGGTGGATGGTCATT  
 CAGACTCTGACGAGGATCTGTGCAGATGCCAGTGTGTTGTGGATATTTATGTCAACTAC



[View online »](#)

GACTGTGATTTAAATGCTGCTAACATTTTTGAGCGCCTTGTAATGATTTATCCAAAATT  
 GCTCAGGGAAGAAGTGGACATGAGCTGGGAATGACACCTCTGCAGGAGCTCAGCCTGAGG  
 AAGAAAGGCTGGAGTGCCTCGTGTCCATTCTCAAGTGCATGGTGGAGTGGAGCAAAGAC  
 CTGTATGTGAATCCCAACCAGCAGACCAGCCTCGGTGAGGAGAGGCTCACGGATCAGGAA  
 ATAGGGGATGGGAAAGGCCTTGACATGGCAAGACGGTGTAGTGTGACGTCCATGGAGTCC  
 ACAGTGTCTCGGGACCCAGACAACCTGTTTCAGGATGACCCTGAGCAATTTGAGGTATC  
 AAGCAACAAAAAGAAATCATTGAACACGGCATCGAGCTGTTCAACAAGAAACCCAAAGAGG  
 GGGATCCAGTTTTCTCAGGAGCAGGGCATGCTGGGAACGTCAGTTGAAGACATAGCCCAA  
 TTCTGACACCAGGAGGAGCGCCTGGATTCCACCCAAGTAGGCGATTTTTCTGGGAGATAGC  
 GCAAGGTTCAACAAGGAGGTGATGTATGCCTACGTGGACCAACTTGACTTCTGTAAAAA  
 GAATTTGTCTCAGCCCTGCGGACATTCCTAGAAGTTTTCCGCTACCTGGAGAAGCCCAA  
 AAGATTGACCGATTAATGGAGAAGTTTGCCGCAAGATACATAGAATGCAACCAAGGGCAA  
 ACTCTGTTTGCTAGTGTGACTGCTTATGCTCCTAGCGTATTCAATTATATGCTGACT  
 ACAGACTTGCACAGTCCAGGTAATAAATAAATGACGAAAGAGCAGTATATTAATG  
 AATCGGGTATCAATGATAGTAAAGATCTGCCAGAAGAGTATCTCTCAAGCATCTATGAA  
 GAGATAGAAGGCAAGAAAATTGCAATGAAAGAAACAAAAGAGCTAACGATTGCAACCCAA  
 TCTACTAAGCAGAATGTAGCTAGTGAAGCAGCGCGGCTGCTGTACAACCTTAGAGATG  
 GAGCAATGGCTAAAACAGCCAAAGCTCTGATGGAGGCTGTGAGCCATGCCAAAGCCCCG  
 TTTACAGTGCCACTCACCTGGACCATGTCGGCCAATGTTCAAACCTGGTGTGGACGCCA  
 CTATTGGCAGCCTACAGCATCGGACTCCAGAATGTGATGACTGAAGTGGCCTCCTTG  
 TGTTTGAAGGCATCCGATGTGCAATCCGAATCGCCTGCATCTTTGGAATGCAGCTGGAA  
 CGAGATGCCTATGTTTCAGGCTCTTGCTCGCTTCCCTACTCACAGCCAGCTCCAGCATC  
 ACAGAAATGAAGCAGAAAAACATCGACACCATTAAAGCGTTATCACAGTGGCTCACACC  
 GATGGCAACTACCTTGGGAATTCCTGGCATGAGATCTTGAATGCATCAGCCAGCTGGAG  
 CTCGCTCAGTGTAGGAACCGGTGTGAAGACGCGCTACCTGTCTGGATCTGGGCGTGAA  
 AGAGAAGGGAGCCTGAAGGGCCACACATTGGCAGGAGAAGAGTTCATGGCCCTTGGCCTC  
 GGTAAATTTGGTGAAGTGGCGGAGTGGATAAAAGACAGATGGCCAGCTTCCAAGAATCGGTT  
 GGTGAGACCAGCTCGCAGAGTGTGGTGTAGCTGTGGACAGGATTTTTACTGGGTCTACC  
 AGACTGGATGGAAATGCAATAGTTGACTTTGTCCGCTGGCTGTGTCTGTGTCCATGGAT  
 GAACTGGCTTCCCCCACCATCCTCGCATGTTTCAGCTTGCAGAAGATTGTGGAGATATCA  
 TACTACAACATGAATCGGATCCGACTACAGTGGTCTCGAATATGGCATGTGATTGGAGAT  
 CACTTCAATAAGGTTGGCTGCAACCCTAATGAAGATGTGGCTATCTTTGCTGTTGACTCA  
 TTAAGGCAACTCTCCATGAAGTTTTCTTGAGAAGGGTGAATTAGCCAACCTCCGTTTCCAG  
 AAAGATTTTCTGAGGCCCTTTGAGCATATTATGAAGAAAAACAGGTCTCCCACCATCCGG  
 GACATGGCGATCCGCTGCATTGCCAGATGGTGAACCTCCAGGCGGCCAACATCCGCTCA  
 GGTGGAAGAACATCTTTGCCGTGTTCCACCAGGCAGCCTCTGATCATGATGGGAACATT  
 GTGGAGCTGGCCTTCCAGACCATTGCCACATTGCACAACATTTTTCCAGCACCATTTT  
 CCTGCAGCCATCGATTCTTTTCAGGATGCTGTGAAGTCTTATCAGAGTTCGCTGCAAC  
 GCCGCTTCCCTGACACGAGCATGGAAGCGATTCCGCTCATCCGCTTCTGTGGCAATAC  
 GTCTCTGAGAGGCTCGGGTGTACAAGAATACACAAGTATGACATGAATGTAGCTCCT  
 GGTGACAGAGTCTGGGTCGAGGCTGGTTCCCCATCTTATTGCAACTCTCCTGCATCATT  
 AATAGATGCAAGTTAGATGTACGAACAAGGGGACTCACAGTATGTTTGAGATCATGAAG  
 AGCTATGGCCACACCTTTGAAAAGCACTGGTGGCAGGACCTGTTTCAGAATTGTGTTTCGG  
 ATTTTTGACAATATGAACTCCCTGAGCAACTGTCAGAGAAATCTGAGTGGATGACAACA  
 ACCTGCAATCACGCACTTATGCTATTTGTGATGTTTTTACCCAGTTTTATGAAGCTTTG  
 AATGAAGTCTTCTTTCTGATGATTTGCACAATTGCAGTGGTGTGTCAAACAAGATAAT  
 GAACAGTTGGCGGATCAGGTACAAATTGCTTAGAAAACCTTAGTAATATCCAATGGAGAG  
 AAATTCAGTCTGAAGTCTGGGATGAAACCTGCAACTGTATGTTGGATATTTTCAAACA  
 ACCATCCCACATGTTTTGCTGACATGGAGACCTGTAGGAATGGAGGAAGATTCATCAGAA  
 AAGCATTTGGATGTGGATCTGGACCGCCAGTCTTAAGCAGCATAGATAAAAAATCCCTCT  
 GAGAGGGGACAGAGCCAGCTCTTAACCCAACAGATGACAGCTGGAGGGGTAGACCATAC  
 GCAATCAGAACTGTTTGCCAGCCTCCTCATCAAGTGTGTGGTCCAGTTGGAATTGATA

CAGACCATTGACAACATTGTGTTCTACCCTGCGACGAGCAAAAAGGAGGATGCAGAGCAC  
 ATGTTGCGCCAGCAAGACACGCTGGATGCAGATATCCACATAGAGACGGAGGATCAG  
 GGCATGTATAAGTACATGTCTTCCAGCACCTCTTCAAGCTGTTGGACTGTTTCAGGAA  
 TCCCATTCATTCTCAAAGGCCTCAACTCCAATTACGAGCAGCGGACTGTCTGTGGCGA  
 GCAGGTTTTAAGGGCAAGTCTAAACCAATCTTCTAAAACAAGAAACCAGCAGCCTGGCC  
 TGTGTTTGAGGATCCTGTTTCGAATGTATGTTGATGAGAACCGCAGGGATTCTGGGAA  
 GAAATACAGCAGAGACTTTAACTGTTTGCAGTGAAGCTCTTGCCTATTTTCATCACTGTG  
 AATTCTGAGAGCCATCGGGAGGCTGGACAAGTCTTGTGTTACTTCTAACTAAAACC  
 CTCAAAAATAAATGATGAAAAGTTCAAAGCACATGCTTCAATGACTACCCCTACTTGTGT  
 GAAATTATGCAGTTTACCTGATCCCTGAGCTCCGAGCAGTTCTGCGGAAGTTCTTCTA  
 CGGATAGGTGTTGTGATAAGATATGGATACCAGAAGAGCCATCACAGGTACCAGCAGCA  
 CTGTCACCAGTGTGTAGCCCTGGCTGCCAGGCCAGTGTGCAGCTCTGCAGAATGTTT  
 AGCATGCCATTTCTGACTGGCACATCTCGTGAAGTTTCATAGAAAACAAGGAGTTGGCATC  
 TTGGATCTCAGAATGGCCTGGAAACGGATGGCCTCTACGCTGTTCCATCACAGTCTCCAA  
 CTAAGGCTTATGGTATTTTCAATAAAGTGTGCATACCCAGTTAGCACAGTAGGTGGGGAG  
 TCTGCTTCATTTCTATCATTCCATTTTTCTGATTAAGTGTCAAATCTGTCAATTGCATAT  
 GCCATCGTTTTCTAGCAAAATCCCATGATTGGCTATAAACGTTTTGTAAAGAGTCACTCT  
 CCTTGAATAACTGAACATAGCTGTATAGGTTTGTGATTATTAGAGAATATGTTAATAAA  
 ACTTCTTGTAAACGGCTAACTGCCACCTAAAATATGCTGGGTTTTCTGTTGTTGAGTGTG  
 TTAGAGAAATTTGAATGTTTTTGCAGTTACGAGTCAGCCGTAATTAGATTAGTTAAGG  
 ACAGGTCAGGATTAGAGAAGAGTTGTTTTGTGTTTTGTTAATGTCTGAGTGATTTTTAA  
 AGTATTTTACAAAAGATATTGAAAATTTGGTTGAAGGCAGAGTTTAGTAATTAAGTTAG  
 AATTAAGAGTTTTGCGAGGTTAAAAAATGTCCTCGTGGATCTCCCTGTTTTAGTAACA  
 TGGAGAGAAAAGTCTACACGAAAAGTGAACAATTTAATGAAGATGATTAGCCTTCCTT  
 GAAATAAGTATTTGTTGATGGTGTAAATTAATAATTTCCAGAATACACTGTCCATCTCA  
 CACTCTGAAATCTAATATATGAAGTAGTAATGAAAATGAAGTAGTAATTTAACAGAG  
 TTCATTTATCCTTGAATAAACCTTTTTATTTTACCTCAGAAAAGTGAAGTACTGGCAG  
 TTAGTGTCACTGCTTTCACAGTCCCATTAAGGACCTCCAGAGAGGGACAGTAACTG  
 TGCATGAGAAGCCGCTCCATAAGCCTCCTCAGCCAGATGTCATGGTGGAACTGGAGCT  
 GTGTGGGGCCAGCACAGCTGAACTGTGACAATGGCAGGAGTGGCATGTGCCAGCACT  
 TCCATTAATCTGAGCCTAGGAGTTGAATCTTTGGCAAGTTGGATTCTGAGTCTTAT  
 TATGTTAATGATGGTGAATACTCTCACCTGCAGTAGAACTGAGTTCTGCTGCAGCTTGT  
 GTAAAAGTGGGCAGTACACAAGTACGTCCCAAAGCCTGTGAGCAGTATACGTGGATGCTC  
 ACCCATGAGAAGGAGCACACACGCTCATTCTCTGCCCTCACCCACTGCTCACCTAGAGC  
 ATCGCTGAGCGTTAGACAAAGTGTACACAGAATGATTAACACTTTCAGACTTCTACCTA  
 TGCTCTTTAGTCTGTAAATGGGTTGTATTGATGTCAACTCTGGTGCCTTAGAAGTTAG  
 TAGTTTGGGAACCTATCTGTAATAACAGATGTTTTTCTTTGTAGAGAAGGATTTCTGGT  
 GCTTTTGTCTACTAAGAGACCGATATTTCTTAAGTTGTTTTCTTTGTTTTAACAGCCTTGA  
 AAATGTTTTGTTTTGGCCAGCAGAATTTGTCTACTTTTTTTCTTTCCAAAAAGTGT  
 TTTAATTTCTCTACCAAAGAAAAAATGAGCAGGTTTAGGTTTTTACATGACTTATATACA  
 TTAGATAAAAAGGAGCTGTATAATTTAGCAGGAAGGGACTATGGGAGAATACTTTACTGTG  
 AGTGGAAAATGTTAGCACATTTGACTGGTTTGCCTGGAATCCACTGCACCTTTACACTG  
 CACCATGAAACCTACACTCCCTGGTATCATAGCGCGTCATCACCTCAACAAGTCAGTCGT  
 CTCATTGATATTTGTACAAAAGGTATACATGGGGAACACGTGTTCAATCATTAAAGTCCA  
 TCTTGCCTGCAGCTATATCCCTGATTGGTTATTTTTCTTTCTTCTGAGGTTCTCATGT  
 CATTTTCTTCATCGGATGTGACTAAAATTTTTCTGGTGTCTTCTGCCCTCTCTTAAATTT  
 TGCTCTTGGAGGGTAGCAGATGTGTCAGTGCATTTTATTACTTGCTGAAACATTCAGGC  
 TTACATTTCTTATTAGTTTAGTATTTTAAAAGATTTAATTTTCTGAATGAGGCATTTGAA  
 TTGTACCAGCAATGGACTTTTTAAAAAATTGGATGTAAAACCATTCAGGGTGATTTTTCTT  
 GTCAGTGGACAGTGACGAACAGAGATTTGAAATCCCTTACCTCCAATAAATAGCCATTCA  
 GCCTAAATTCATTTTTATGAATAAATCTCTTTCTCATGGTAAATGTGGCTTGTGCCA  
 CTCAAACACTAGTGAAAGGGTATGTACAACCGCAACATCAGGCCAGGACACCATTTATTT

AACCAAGTAATGGAGGAGAGTGAAACATTTTCCAAGGCCTTATTTCTTTTCAGAATGCT  
TTAAGTGTTGATTATGTGTGCTGGGTCTCTAGA

**5' Read Nucleotide  
Sequence:**

>OriGene 5' read for NM\_006420 unedited  
GGGGGAAGGAGGGGCGACATTTGTATACCATCATATAGCGGCCGCTGATTGCGCCTTAT  
GCAGAGAGCCGACCAAGACATGTTTCGTGTCCCGGCCCTGGAGAAGATCCTAGCCGACAA  
GGAGGTGAAGCGGCCAGCACTCCCAGCTGCGCAGGGCCTGCCAGGTGGCGCTCGATGA  
AATTAAGCAGAAATAGAAAAGCAGAGGCTTGGCACTGCTGCACCACAAAGGCAAACCTT  
CATTGAAGCTGACAAGTATTTTCTCCATTGAGCTAGCTTGCCAGTCCAAGTCCCAAG  
GGTAGTCAGCACATCCCTTGACTGCTTGCAGAACTCATCGCATACGGGCACATCACTGG  
CAACGCCCTGACAGTGGAGCCCTGGGAAGCGGCTGATCGACAGAAATTGTTGAAACCAT  
TTGCAGTTGTTTTCAGGGCCCTCAGACTGATGAAGGGTTCAGTTACAAATAATTAAGGC  
TCTTCTGACTGCAGTGACTTCCCACACATTGAAATTCATGAGGGTACTATCCTGCAGAC  
AGTGAGAACATGTTACAATATCTATTTGGCCAGCAAAAATCTCATCAATCAAACCATGC  
CAAGGCTACCCTTACTCAGATGCTGAACGTCATTTTACC CGCCTGGAAAACCAAGTGTT  
GCACGATGCCAGAGAAGTGGAAAACCAATCCAGTCAAAACCCCAATTCCTGTGATCCA  
AGCTGCAACAGTATCCCCAAAGTTCGTTTCGTTTGAAGCACAGTCAGGCCAAAGCAAACC  
AACAACTCCCGAAAAACAGATTTAACCCACGGTGGAACATGCCCGGAGTTGATTCTGG  
GAAAAGTAAACT

**3' Read Nucleotide  
Sequence:**

>OriGene 3' genomic read for NM\_006420 unedited  
NAACACNGCCTCTAGGAGATGGCACTTNCAGNCCAGNGAGAGCACTGGNGNAGGGG  
TCACAGGNATGCCACCCGGNATCTGTTTCAGAAACGCTATGACCGCGGCCGAATCTAG  
AGACCCAGCACACATAATCAACACTTAAGCATTCTGAAAAAATAAGCCTTGGAAAAGT  
TTCCTCTCCTCCATTACTTGGTTAAATAAATGGTGTCTTGGCCTGATGTTGCGTTGTA  
CATACCTTTCACTAGTGTGTTGAGTGGCACAAGCCACATTTACCATGAGAAAGAAGAT  
TTATTCATAAAAAATGAATTTAGGCTGAATGGCTTATTATTGGAGGTAAGGGATTTCAAAT  
CTCTGTTTCGTCCTGACTGTCCTGACAAGAAAAATCACCTGAATGGTTTTACATCCAATTT  
TTTAAAAGTCCATTGCTGGTACAATTCAAATGCCTCATTGAGAAAATTAATCTTTTAAA  
ATACTAACTAATAAGAAATGTAAGCCTGAATGTTTCAGCAAGTAATAAAATGCCTGAC  
ACATCTGCTACCCCTCAAGAGGCAAAATTAAGAGAGGGGAGAAAGACACCAGANAATTT  
TAGTCACATCCGATGAAGAAAATGACATGAGAACCTCAGAAGGAAAAGGAAAAATAACCA  
ATCAGGGATATAGCTGCACGCAAGATGGACTTAATGAATGAACACGTGTTCCCATGAT  
ACCTTTTGTACAAATATCAATGGAAACGACTGACTTGTGTTGAGTGATGACGCGCTATGAT  
ACCAGGGAGTGTAGGTTTCATGGTGCAGTGTAAAAGTGAATGGATTCCAGGGCAAACCA  
GTCAAATGTGCTAACATTTTCCCATCACAGTAAAGTTTTTC

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_006420

**Insert Size:**

7900 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:**

There are 7 nucleotide differences between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 4 amino acid.

**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\\_006420.1](#), [NP\\_006411.1](#)

**RefSeq Size:** 5860 bp

**RefSeq ORF:** 5358 bp

**Locus ID:** 10564

**UniProt ID:** [Q9Y6D5](#)

**Cytogenetics:** 20q13.13

**Gene Summary:** ADP-ribosylation factors (ARFs) play an important role in intracellular vesicular trafficking. The protein encoded by this gene is involved in the activation of ARFs by accelerating replacement of bound GDP with GTP and is involved in Golgi transport. It contains a Sec7 domain, which may be responsible for its guanine-nucleotide exchange activity and also brefeldin A inhibition. [provided by RefSeq, Jul 2008]