

## Product datasheet for **SC117966**

### **AKAP1 (NM\_003488) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AKAP1 (NM_003488) Human Untagged Clone
Tag:	Tag Free
Symbol:	AKAP1
Synonyms:	AKAP; AKAP84; AKAP121; AKAP149; D-AKAP1; PPP1R43; PRKA1; SAKAP84; TDRD17
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_003488, the custom clone sequence may differ by one or more nucleotides

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ATGGCAATCCAGTTCGGTTCGCTCTTCCCCTTGGCATTGCCTGGGATGCTGGCGCTCCTCGGCTGGTGGT
GGTTTTTCTCTCGTAAAAAGGCCATGTCAGCAGCCATGATGAGCAGCAGGTGGAGGCTGGTGTGTGCA
GCTGAGGGCTGACCTGCCATCAAGGAACCTCTCCCCGTGGAAGACGTCTGTCCCAAAGTAGTGTCCACA
CCCCCAGTGTCACAGAGCCTCCAGAAAAGGAAGTGTCCACCGTGAGCAAGCTGCCTGCAGAGCCCCAG
CATTGCTCCAGACACACCACCTTGCCGAAGATCAGAGTCTCGGGCATTCTTCTAACACCACAGACAT
GAGATTGCGACCAGGAACACGCAGAGATGACAGTACAAAGCTGGAGCTAGCCCTGACAGGTGGTGAAGCC
AAATCGATTCTCTAGAGTGCCCCCTTTCATCCCCAAAGGGTGTACTATTCTCCAGCAAATCAGCTGAGG
TGTGTAAGCAAGATTCCCCCTTTCAGCAGGGTGCCAAGGAAGTCCAGCCAGGCTACCCCGTAGTCCCCGC
AGAGAAGCGTAGCTCTGGGGAGAGGGCAAGAGAGACAGGTGGGGCCGAAGGGACTGGTGTGCCGTGTTG
GGGAAAAGGTGCTTGAAGAAGCTCTGTTGTCTCGGGAGCATGTCTTGAATTGGAGAACAGCAAGGGCC
CCAGCCTGGCCTCTTAGAGGGGAAGAAGATAAGGGGAAGAGCAGCTCATCCAGGTGGTGGGGCCAGT
GCAGGAGGAAGATATGTAGCAGAGAAGTTGCCAAGTAGGTTTCATCGAGTCGGCTCACACAGAGCTGGCA
AAGGACGATGCGGCGCCAGCACCCCAAGTCGCAGACGCCAAAGCCAGGATAGAGGTGTCGAGGGAGAAC
TGGGCAATGAGGAGAGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAA
TGAGGAGAGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGATTAAGCGGGCTGCCTCCAG
ATAATCTCCAAAGTATCTCAGAAGCAACCGAACAGGTGCTGGCCACCACGGTTGGCAAGGTTGCAGGTC
GTGTGTGTGTCAGGCCAGTCAAGGGCAGAGGCAAGGAAGAGAGCTGTGTCCAGTTCACCAGAAAAGTGT
CTTGGGCCAGACACTGCGGAGCCTGCCACAGCAGAGGCAGCTGTTGCCCGCCGGATGCTGGCCTCCCC
TTGCCAGGCCTACCAGCAGAGGGCTCACACCACCAAGACCTACGTGAGCTGCCTGAAGACCTTCTGT
CCAGCCCCACCAAGGACAGTAAGCCAAATATCTCTGCACACCACATCTCCCTGGCCTCTGCCTGGCACT
GACCACCCCAAGTGAAGAGTTGCCGAGCCGGCAGGCATCCTGGTGAAGATGCCACCTGTGTACCTGC
ATGTGACAGCAGCAGCAAAGTGTCCCTTGGTGGCTTCTCCAGGACACTGCTCAGATTCTTTCAGCACTT
CAGGGCTTGAAGACTCTTGCACAGAGACCAGCTCGAGCCCCAGGGACAAGGCCATCACCCCGCCACTGCC
AGAAAGTACTGTGCCCTTCAAGCAATGGGGTGTGAAGGGGGAGTTGTGAGACTTGGGGGCTGAGGATGGA
TGGACCATGGATGCGGAAGCAGATCATTAGGAGGTTCTGACAGGAACAGCATGGATTCCGTGGATAGCT
GTTGCAGTCTCAAGAAGACTGAGAGCTTCCAAAATGCCAGGCAGGCTCCAACCTAAGAAGGTCGACCT
CATCATCTGGGAGATCGAGGTGCCAAAGCACTTAGTCGGTCGGCTAATTGGCAAGCAGGGGGCTATGTG
AGTTTTCTGAAGCAAACATCTGGTGCCAAGATCTACATTTCAACCCTGCCTTACACCCAGAGCGTCCAGA
TCTGCCACATAGAAGGCTCTCAACATCATGTAGACAAAGCGCTGAACTTGATTGGGAAGAAGTCAAAGA
GCTGAACCTCACCAATATCTACGCTCCCCATTGCCTTCACTGGCACTGCCTTCTCTGCCGATGACATCC
TGGCTCATGCTGCCTGATGGCATACCCGTGGAGGTCATTGTGGTCAACCAGGTCAATGCCGGCACCTGT
TCGTGCAGCAGCACACACCCTACCTTCCACGCGCTGCGCAGCCTCGACCAGCAGATGTACCTCTGTTA
CTCTCAGCCTGGAATCCCCACCTTGCCACCCCAAGTGGTTCCTACGAGGAGACCAACGAAGTGGAGATTCGATACG
GACGGGGCCTGGTGGCGAGCCCAAGTGGTTCCTACGAGGAGACCAACGAAGTGGAGATTCGATACG
TGGACTACGGCGGATATAAGAGGGTGAAGTAGACGTGCTCCGGCAAATCAGGTCTGACTTGTCAACCCT
GCCGTTTCAGGGAGCAGAAGTCTTCTGGACAGTGTGATGCCCCTGTGAGACGATGACCAGTTTTACCCG
GAAGCAGATGCCCCATGAGCGAGATGACGGGAATACAGCACTGCTTGCTCAGGTGACAAGTTACAGTC
CAACTGCTCTTCTCTGATTTCAGCTGTGGAGTGTGGTTGGAGATGAAGTGGTGTGATAAACCGTCCCT
GGTGGAGCGAGGCCTTGCCCAAGTGGTGTAGACAGCTACTACACAAGCCTTGA
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003488 unedited  
 GATTTTGTAAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCTAGCACGTGG  
 GGGAGCTGCGGAAGCGCGGCGCTGCGGGCCGGGCCGCGGGGCACAGCCGGGGGCCGGCGG  
 CGGCGCGGACTCCGCATCCCCGACCCCGATGGTGGCCGAGGAGCTGGTGAATTA  
 CAAGCCTCCAGGATGGCAATCCAGTTCGGTTCGCTCTTCCCCTTGGCATTGCCTGGGATG  
 CTGGCGCTCCTCGGCTGGTGGTGGTTTTTCTCTCGTAAAAAAGGCCATGTCAGCAGCCAT  
 GATGAGCAGCAGGTGGAGGCTGGTGTCTGTGCAGCTGAGGGCTGACCCTGCCATCAAGGAA  
 CCTCTCCCGTGGAAAGAGCTGTGCCAAAGTAGTGTCCACACCCCCAGTGTACAGAG  
 CCTCCAGAAAAGGAACTGTCCACCGTGAGCAAGCTGCCTGCAGAGCCCCAGCATTGCTC  
 CAGACACACCCACCTTGCCGAAGATCAGAGTCTCGGGCATTCTTCTAACACCACAGAC  
 ATGAGATTGCGACCAGGAACACGCAGAGATGACAGTACAAAGCTGGAGCTAGCCCTGACA  
 GGTGGTGAAGCCAAATCGATTCTCTAGAGTCCCCCTTTCATCCCAAAGGGTGTACTAT  
 TCTCCAGCAAATAGCTGAGGTGTGAAGCAAGATTCCTTCCAGCANGGTGCCAAGGAA  
 GGTCCAGCCAGGCTACCCCGTAGTCCCCGCAGAGAAGCGTAGCTCTGGGAGAGGGCAAG  
 AGAGACAGGTGGGGCCGAAGGGACTGGTGTGCCCGTGTGGGGGAAAAGGTGCTNGANA  
 AACTCTGNTGTCTCGGGAGCATGTCTTGAATTGGAGAACAGCAC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_003488 unedited  
 ATGTACGCGCCGCATCTATAGTCGGTTTTTTTTTTTTTTTTTTTTAAACANATTTGTACAG  
 CAAAAAGTCCCAGATCACAGTCTACCATACAGTCACCTGTCCAGTGTGCAGGAAGCC  
 ACAGGGCCCTGGCCAGAGGGGCAAGAGCAGAAGCTGCACTGCAGAGTTTACTTCTACC  
 TACAGGTGACATGTGGCTGGAAGAATCTTGAGTCCCTTTGTTCTCCAGTGTATCTTGTA  
 CAAAATATTACATTTGTTTAAACACATATTTACAGAGTTTGCACAAATAGAAAATGGTTA  
 CAAATTACAACAGGCTTGGCAGGATACCAAGTCCCCTCCCCTGACCAAGGTCAGATG  
 TGATGACCATTTCATATTTACAGTTGCAATTTAAAAAGTCTGTGTTTAGAGACCTAAATG  
 AAGTTTATAAAAACTGGTTAAATATCATCAACTCATTTATGTAAGCTGTACAAGTAGTGG  
 ATACCAATTAGTCAGTTCATGTCTTGCTCCCTGAAGAAAGATTTTGAAGTAAAAGATACC  
 CTCTCAAGCAAGCAACATACATCCCTGGCCTGTCTGCCAGTTTGTGGTTTTTGGCCGGG  
 GAAGGAGATAGAATGAACAAGATGGGAATGGAACAGGCGGAATAAGACAATTCGGCTTGA  
 AACCGGCTCTATTCCTTTTTTTTTTTTTTTTTTAAACGCTTGAACCAAGGATAATCCAGCTG  
 GCTTGGCAAACACTTTCTTTGGCTCTGCGAAGATAACCCCAATTTATCTCCTTTTTTTC  
 CAAAAACCAAACGGCTTCTCTTGGCTACTCCCTGGACAAAAAAGGACCTTCTGAAAAG  
 GCCCGGTGCTCTTCCATGCTCTCTTGGCCCGGGCTCTACCCATTTGTATCCGCTTAA  
 CATTCCCGAACCCCTTCGAAAATGCCCGTACTATCCTTTATCCCTCGCTGCTTCTCAT  
 TTTAGTCACCTATCCACACATATTTATAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_003488

**Insert Size:**

3890 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_003488.2](#), [NP\\_003479.1](#)

**RefSeq Size:** 3968 bp

**RefSeq ORF:** 2712 bp

**Locus ID:** 8165

**UniProt ID:** [Q92667](#)

**Cytogenetics:** 17q22

**Domains:** TUDOR, KH, TUDOR

**Protein Families:** Druggable Genome, Transmembrane

**Gene Summary:** The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins, which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. The encoded protein binds to type I and type II regulatory subunits of PKA and anchors them to the mitochondrion. This protein is speculated to be involved in the cAMP-dependent signal transduction pathway and in directing RNA to a specific cellular compartment. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) represents the longest first intron.