

## Product datasheet for **RC235012**

### **AKAP1 (NM\_001242902) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AKAP1 (NM_001242902) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AKAP1
Synonyms:	AKAP; AKAP84; AKAP121; AKAP149; D-AKAP1; PPP1R43; PRKA1; SAKAP84; TDRD17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC235012 representing NM\_001242902  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAATCCAGTTCGTTCCGCTTCCCTTGGCATTGCCTGGGATGCTGGCGCTCCTCGGCTGGTGGT  
 GGTTTTCTCTCGTAAAAAGGCCATGTCAGCAGCCATGATGAGCAGCAGGTGGAGGCTGGTGTGTGCA  
 GCTGAGGGCTGACCCTGCCATCAAGGAACCTCTCCCCGTGGAAGACGTCTGTCCCAAAGTAGTGTCCACA  
 CCCCCAGTGTACAGAGCCTCCAGAAAAGGAAGTGTCCACCGTGTGAGCAAGCTGCCTGCAGAGCCCCAG  
 CATTGCTCCAGACACACCCACCTTGCCGAAGATCAGAGTCTCGGGCATTCTTCCAACACCACAGACAT  
 GAGATTGCGACCAGAACACGCAGAGATGACAGTACAAAGCTGGAGCTAGCCCTGACAGGTGGTGAAGCC  
 AAATCGATTCTCTAGAGTGCCCTTTTATCCCCAAAGGGTGTACTATTCTCCAGCAAATCAGCTGAGG  
 TGTGTAAGCAAGATTCCTTTCAGCAGGGTCCAAAGGAAGTCCAGCCAGGCTACCCCGTAGTCCCGGC  
 AGAGAAGCGTAGCTCTGGGAGAGGGCAAGAGAGACAGGTGGGGCCGAAGGGACTGGTGTATGCCGTGTG  
 GGGAAAAAGTGTCTGAAGAAGCTGTGTGTCTCGGGAGCATGTCTTGAATTGGAGAACAGCAAGGGCC  
 CCAGCCTGGCCTTTAGAGGGGGAAGAAGATAAGGGGAAGAGCAGCTCATCCAGGTGGTGGGGCCAGT  
 GCAGGAGGAAGAGTATGTAGCAGAGAAGTTGCCAAGTAGGTTTCATCGAGTCGGCTCACACAGAGCTGGCA  
 AAGGACGATGCGGCGCCAGCACCCTCAGTCGCAGACGCCAAAGCCAGGATAGAGGTGTCGAGGGGAGAAC  
 TGGGCAATGAGGAGAGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAA  
 TGAGGAGAGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGATTAAAGCGGCTGCCTTCCAG  
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 GTTGCAGTCTCAAGAAGACTGAGAGCTTCCAAAATGCCAGGCAGGCTCCAACCTAAGAAGGTCGACCT  
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 CTCTCAGCCTGGAATCCCACCTTGCCACCCAGTGAATAACGGTCACTGTGCCGCCCTGGTGGC  
 GACGGGGCTGGTGGCGAGCCAAAGTGGTTGCCTCCTACGAGGAGACCAACGAAGTGGAGATTCGATACG  
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 GCCGTTTCAGGGAGCAGAAGTCTTCTGGACAGTGTGATGCCCTGTGACAGCATGACCAGTTTTACCCG  
 GAAGCAGATGCCGCCATGAGCGAGATGACGGGGAATACAGCACTGCTTGTGCTCAGGTGACAAGTTACAGTC  
 CAACTGGTCTTCTCTGATTAGCTGTGGAGTGTGGTTGGAGATGAAGTGGTGTGATAAACCGGTCCTT  
 GGTGGAGCGAGGCCTTGCCAGTGGGTAGACAGCTACTACACAAGCCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC235012 representing NM\_001242902  
Red=Cloning site Green=Tags(s)

MAIQFRSLFPLALPGMLALLGWWWFFSRKKGHVSSHDEQQVEAGAVQLRADPAIKEPLPVEDVCPKVVST  
 PPSVTEPEPEKELSTVSKLPAEPPALLQTHPPCRRSESSGILPNTTDMRLRPGTRRDDSTKLELALTGGEA  
 KSIPLECPLSSPKGVLFSSKSAEVCKQDSPFSRVPRKVQPGYPVPAEKRSSGERARETGGAEGTDAVL  
 GEKVL EEALLSREHVLELENSKGPSLASLEGEEDK GKSSSQVVGVPVQEEYVAEKLPSRFIESAHTELA  
 KDDAAPAPPVADAKAQDRGVEGELGNEESLDRNEEGLDRNEEGLDRNEESLDRNEEGLDRNEEIKRAAFQ  
 IISQVISEATEQVLATTVGK VAGRVCQASQLQGQKEESCVPVHQKTVLGPDTAEPATAEAAVAPPDAGLP  
 LPGLPAEGSPPKTYVSCLKSLSSPTKDSKPNISAHHISLASCLAL TTPSEELPDRAGILVEDATCVTC  
 MSDSSQSVPLVASPGHCSDSFSTSGLEDSTETSSSPDKAITPPLPESTVPFSNGVLKGELSDLGAEDG  
 WTMDAEADHSGGSDRNSMDSVSDCCSLKKTESFQNAQAGSNPKKVDLIIWEIEVPKHLVGRIGKQGRYV  
 SFLKQTS GAKIYISTLPYTQSVQICHIEGSQHVDKALNLIGKKFKELNL TNIYAPPLPSLALPSLPMTS  
 WLMLPDGITVEVIVVNQVNAGHLFVQQHTHTPFHALRSLDQQMYLCYSQPGIPTLPTPVEITVICAAPGA  
 DGAWWRAQVVASYEETNEVEIRYVHYGGYKRVKVDVLRQIRSDFVTLPFQGAEVLLDSVMPLSDDDQFSP  
 EADAAMSEMTGNTALLAQVTSYSPTGLPLIQLWSVVGDEVVLINRSLVERGLAQWVDSYYTSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

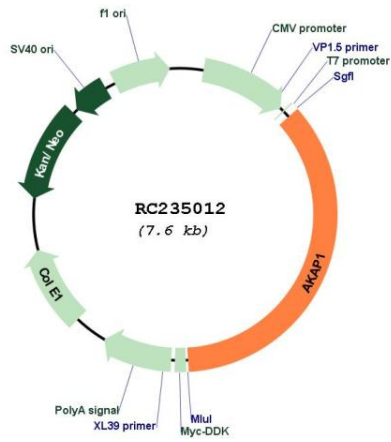
**Cloning Scheme:**



**ACCN:** NM\_001242902

<b>ORF Size:</b>	2709 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001242902.1</a> , <a href="#">NP_001229831.1</a>
<b>RefSeq Size:</b>	4048 bp
<b>RefSeq ORF:</b>	2712 bp
<b>Locus ID:</b>	8165
<b>UniProt ID:</b>	<a href="#">Q92667</a>
<b>Cytogenetics:</b>	17q22
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	97.4 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC235012