**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RC200506

## AKAP1 (NM_003488) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | AKAP1 (NM_003488) 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) |



View online »

**ORF Nucleotide Sequence:**

>RC200506 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAATCCAGTTCCGTTCGCTCTTCCCCTTGGCATTGCCTGGGATGCTGGCGCTCCTCGGCTGGTGGT
GGTTTTTCTCTCGTAAAAAAGGCCATGTCAGCAGCCATGATGAGCAGCAGGTGGAGGCTGGTGCTGTGCA
GCTGAGGGCTGACCCTGCCATCAAGGAACCTCTCCCCGTGGAAGACGTCTGTCCCAAAGTAGTGTCCACA
CCCCCCAGTGTCACAGAGCCTCCAGAAAAGGAACTGTCCACCGTGAGCAAGCTGCCTGCAGAGCCCCCAG
CATTGCTCCAGACACACCCACCTTGCCGAAGATCAGAGTCCTCGGGCATTCTTCCTAACACCACAGACAT
GAGATTGCGACCAGGAACACGCAGAGATGACAGTACAAAGCTGGAGCTAGCCCTGACAGGTGGTGAAGCC
AAATCGATTCCTCTAGAGTGCCCCCTTTCATCCCCAAAGGGTGTACTATTCTCCAGCAAATCAGCTGAGG
TGTGTAAGCAAGATTCCCCCTTCAGCAGGGTGCCAAGGAAGGTCCAGCCAGGCTACCCCGTAGTCCCCGC
AGAGAAGCGTAGCTCTGGGGAGAGGGCAAGAGAGACAGGTGGGGCCGAAGGGACTGGTGATGCCGTGTTG
GGGGAAAAGGTGCTTGAAGAAGCTCTGTTGTCTCGGGAGCATGTCTTGGAATTGGAGAACAGCAAGGGCC
CCAGCCTGGCCTCTTTAGAGGGGGAAGAAGATAAGGGGAAGAGCAGCTCATCCCAGGTGGTGGGGCCAGT
GCAGGAGGAAGAGTATGTAGCAGAGAAGTTGCCAAGTAGGTTCATCGAGTCGGCTCACACAGAGCTGGCA
AAGGACGATGCGGCGCCAGCACCCCCAGTCGCAGACGCCAAAGCCCAGGATAGAGGTGTCGAGGGAGAAC
TGGGCAATGAGGAGAGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAA
TGAGGAGAGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGATTAAGCGGGCTGCCTTCCAG
ATAATCTCCCAAGTGATCTCAGAAGCAACCGAACAGGTGCTGGCCACCACGGTTGGCAAGGTTGCAGGTC
GTGTGTGTCAGGCCAGTCAGCTCCAAGGGCAGAAGGAAGAGAGCTGTGTCCCAGTTCACCAGAAAACTGT
CTTGGGCCCAGACACTGCGGAGCCTGCCACAGCAGAGGCAGCTGTTGCCCCGCCGGATGCTGGCCTCCCC
TTGCCAGGCCTACCAGCAGAGGGCTCACCACCACCAAAGACCTACGTGAGCTGCCTGAAGAGCCTTCTGT
CCAGCCCCACCAAGGACAGTAAGCCAAATATCTCTGCACACCACATCTCCCTGGCCTCCTGCCTGGCACT
GACCACCCCCAGTGAAGAGTTGCCGGACCGGGCAGGCATCCTGGTGGAAGATGCCACCTGTGTCACCTGC
ATGTCAGACAGCAGCCAAAGTGTCCCTTTGGTGGCTTCTCCAGGACACTGCTCAGATTCTTTCAGCACTT
CAGGGCTTGAAGACTCTTGCACAGAGACCAGCTCGAGCCCCAGGGACAAGGCCATCACCCCGCCACTGCC
AGAAAGTACTGTGCCCTTCAGCAATGGGGTGCTGAAGGGGGAGTTGTCAGACTTGGGGGCTGAGGATGGA
TGGACCATGGATGCGGAAGCAGATCATTCAGGAGGTTCTGACAGGAACAGCATGGATTCCGTGGATAGCT
GTTGCAGTCTCAAGAAGACTGAGAGCTTCCAAAATGCCCAGGCAGGCTCCAACCCTAAGAAGGTCGACCT
CATCATCTGGGAGATCGAGGTGCCAAAGCACTTAGTCGGTCGGCTAATTGGCAAGCAGGGGCGCTATGTG
AGTTTTCTGAAGCAAACATCTGGTGCCAAGATCTACATTTCAACCCTGCCTTACACCCAGAGCGTCCAGA
TCTGCCACATAGAAGGCTCTCAACATCATGTAGACAAAGCGCTGAACTTGATTGGGAAGAAGTTCAAAGA
GCTGAACCTCACCAATATCTACGCTCCCCCATTGCCTTCACTGGCACTGCCTTCTCTGCCGATGACATCC
TGGCTCATGCTGCCTGATGGCATCACCGTGGAGGTCATTGTGGTCAACCAGGTCAATGCCGGGCACCTGT
TCGTGCAGCAGCACACACACCCTACCTTCCACGCGCTGCGCAGCCTCGACCAGCAGATGTACCTCTGTTA
CTCTCAGCCTGGAATCCCCACCTTGCCCACCCCAGTGGAAATAACGGTCATCTGTGCCGCCCCTGGTGCG
GACGGGGCCTGGTGGCGAGCCCAAGTGGTTGCCTCCTACGAGGAGACCAACGAAGTGGAGATTCGATACG
TGCACTACGGCGGATATAAGAGGGTGAAAGTAGACGTGCTCCGGCAAATCAGGTCTGACTTTGTCACCCT
GCCGTTTCAGGGAGCAGAAGTCCTTCTGGACAGTGTGATGCCCCTGTCAGACGATGACCAGTTTTCACCG
GAAGCAGATGCCGCCATGAGCGAGATGACGGGGAATACAGCACTGCTTGCTCAGGTGACAAGTTACAGTC
CAACTGGTCTTCCTCTGATTCAGCTGTGGAGTGTGGTTGGAGATGAAGTGGTGTTGATAAACCGGTCCCT
GGTGGAGCGAGGCCTTGCCCAGTGGGTAGACAGCTACTACACAAGCCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

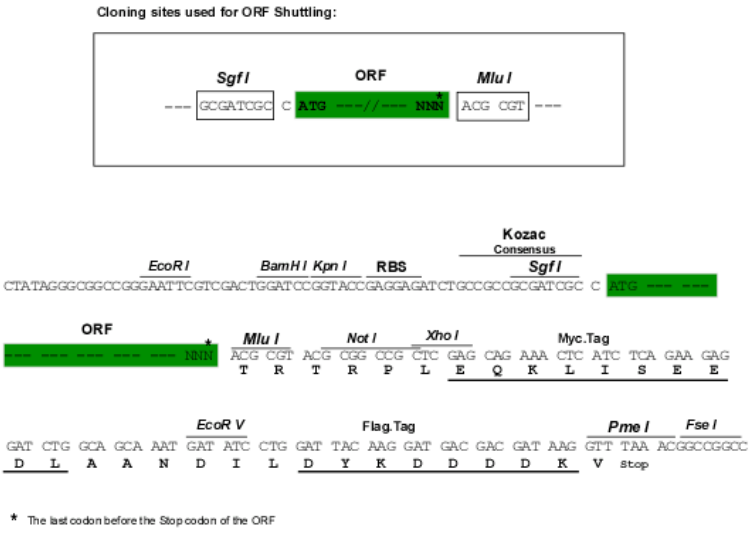
>RC200506 protein sequence
Red=Cloning site Green=Tags(s)

MAIQFRSLFPLALPGMLALLGWWWFFSRKKGHVSSHDEQQVEAGAVQLRADPAIKEPLPVEDVCPKVVST
PPSVTEPPEKELSTVSKLPAEPPALLQTHPPCRRSESSGILPNTTDMRLRPGTRRDDSTKLELALTGGEA
KSIPLECPLSSPKGVLFSSKSAEVCKQDSPFSRVPRKVQPGYPVVPAEKRSSGERARETGGAEGTGDAVL
GEKVLEEALLSREHVLELENSKGPSLASLEGEEDKGKSSSSQVVGPVQEEEYVAEKLPSRFIESAHTELA
KDDAAPAPPVADAKAQDRGVEGELGNEESLDRNEEGLDRNEEGLDRNEESLDRNEEGLDRNEEIKRAAFQ
IISQVISEATEQVLATTVGKVAGRVCQASQLQGQKEESCVPVHQKTVLGPDTAEPATAEAAVAPPDAGLP
LPGLPAEGSPPPKTYVSCLKSLLSSPTKDSKPNISAHHISLASCLALTTPSEELPDRAGILVEDATCVTC
MSDSSQSVPLVASPGHCSDSFSTSGLEDSCTETSSSPRDKAITPPLPESTVPFSNGVLKGELSDLGAEDG
WTMDAEADHSGGSDRNSMDSVDSCCSLKKTESFQNAQAGSNPKKVDLIIWEIEVPKHLVGRLIGKQGRYV
SFLKQTSGAKIYISTLPYTQSVQICHIEGSQHHVDKALNLIGKKFKELNLTNIYAPPLPSLALPSLPMTS
WLMLPDGITVEVIVVNQVNAGHLFVQQHTHPTFHALRSLDQQMYLCYSQPGIPTLPTPVEITVICAAPGA
DGAWWRAQVVASYEETNEVEIRYVHYGGYKRVKVDVLRQIRSDFVTLPFQGAEVLLDSVMPLSDDDQFSP
EADAAMSEMTGNTALLAQVTSYSPTGLPLIQLWSVVGDEVVLINRSLVERGLAQWVDSYYTSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

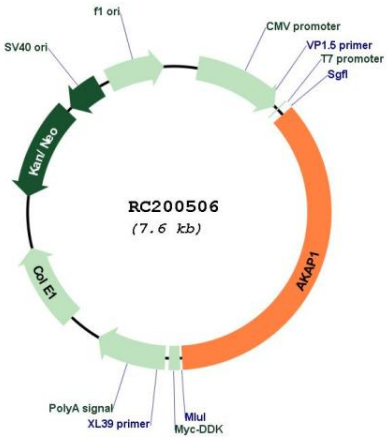
**Cloning Scheme:**



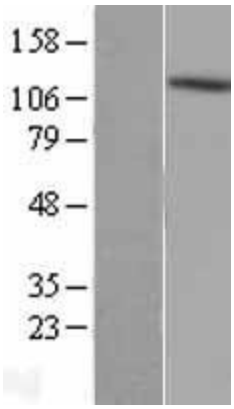

**ACCN:** NM_003488

| | |
|---|---|
| **ORF Size:** | 2709 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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. |
| **Note:** | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| **RefSeq:** | NM_003488.4 |
| **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 |
| **MW:** | 97.4 kDa |
| **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] |

## Product images:




Circular map for RC200506




Western blot validation of overexpression lysate (Cat# [LY418643]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200506 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).