

Product datasheet for **RC221765**

AKAP4 (NM_003886) Human Tagged ORF Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | AKAP4 (NM_003886) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | AKAP4 |
| Synonyms: | AKAP-4; AKAP 82; AKAP82; CT99; FSC1; hAKAP82; HI; p82; PRKA4 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>RC221765 representing NM_003886
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGGCGTACTCTGATACTACAATGATGTCTGATGATATTGACTGGTTACGCAGCCACAGGGGTGTGT
 GCAAGGTAGATCTCTACAACCCAGAAGGACAGCAAGATCAGGACCGGAAAGTGATATGCTTTGTCGATGT
 GTCCACCCCTGAATGTAGAAGATAAAGATTACAAGGATGCTGCTAGTTCAGCTCAGAAGGCAACTTAAAC
 CTGGGAAGTCTGGAAGAAAAAGAGATTATCGTGATCAAGGACACTGAGAAGAAAGACCAGTCTAAGACAG
 AGGGATCTGTATGCCTTTTCAAACAAGCTCCCTCTGATCCTGTAAGTGTCTCAACTGGCTTCTCAGTGA
 TCTCCAGAAGTATGCCTTGGGTTTCCAACATGCACTGAGCCCTCAACCTCTACCTGTAACATAAAGTA
 GGAGACACAGAGGGCGAATATCACAGAGCATCCTCTGAGAAGTGTACAGTGTCTATGCCGATCAAGTGA
 ACATAGATTATTTGATGAACAGACCTCAAACCTACGTCTAGAAATGACAGCAGCTAAAAACACCAACAA
 TAATCAAAGTCTTCAGCTCCTCCAGCCAAACCTCCTAGCACTCAGAGAGCAGTCATTTCCCTGATGGA
 GAATGTTCTATAGATGACCTTTCCTTCTACGTCAACCGACTATCTTCTCTGGTAATCCAGATGGCCATA
 AGGAAATCAAGGAGAAGTTGGAAGGTAAGAAATGCCTTCATCATTCAATCTGTCCATCCCCTGGGAA
 CAAAGAGAGAATCAGTCCCCGAACCTCTGCGAGCAAGATTGCTTCTGAAATGGCCTATGAAGCTGTGGAA
 CTGACAGCTGCAGAAATGCGTGGCACTGGAGAGGAGTCCAGGGAAGTGGCCAGAAAAGCTTTCTATATA
 GCGAATTATCCAACAAGAGCAAAAGTGGAGACAAACAGATGTCCAGAGAGAGAGCAAAGAAATTTGAGAA
 TTCCATCAGCAAGGGGCTCATGGTTTATGCAAAATCAGTGGCATCTGACATGATGGTCTCTCTCATGAAG
 ACCTTGAAAGTGCACAGCTCTGGGAAGCCAATTCAGCATCTGTGGTCTGAAGAGGGTGTGCTAAGGC
 ACACCAAGGAGATTGTGTCGATTTGATTGATTCTTGCATGAAGAACCTGCATAAATATTCTGGGTCCT
 GATGACTGACTCAGACTTTGTCTCAGCTGTCAAGAGAAATCTGTTCAACCAAGTGGAAACAAAATGCTACA
 GACATCATGGAGGCCATGCTGAAGCGCTTGGTCACTGCCCTTATAGGTGAGGAGAAGGAGACTAAGTCTC
 AGAGTCTGTATGATCTTTAAAAGCTGGGTCCCATGATCCCAATGCAGGAATCAGAGTCTTGAATT
 CTCCACCATGAAAGCTGAAATGAAAGAGAGGGACAAAGGCAAAATGAAATCAGACCCATGCAAGTCACTG
 ACTAGTGTGAGAAAGTCGGTGAACACATTCTCAAAGAGGGCCTAACCATCTGGAACCAAAAGCAAGGAA
 ACTCATGCAAGGTGGCTACCAAAGCATGCAGCAATAAAGATGAGAAAGGAGAAAAGATCAATGCTTCCAC
 AGATTCAGTGGCCAGGACCTGATTGTCTCTGCCCTTAAGCTGATCCAGTACCATCTGACCCAGCAGACT
 AAGGGCAAAGATACATGTGAAGAAGACTGTCCTGGTTCCACCATGGGCTATATGGCTCAGAGTACTCAAT
 ATGAAAAGTGTGGAGGTGGCCAAAGTGCCAAAGCACTTTCAGTGAACAACCTAGAATCTCACAGAGCCCC
 TGGACCATCCACCTGTCAAAGGAGAACCAACCTGGACTCCCAGAAAATGGATATGTCAAACATCGTT
 CTAATGCTGATTAGAAACTGCTTAATGAGAACCCTTCAAATGTGAGGATCCATGCGAAGGTGAGAAACA
 AGTGTCTGAGCCAGGGCAAGCAAGCAGCTTCCATGTCCAACAGATCTGACAAAGCGGAAGAACAATG
 CCAGGAGCATCAAGAATGACTGTACCAGTGGGATGAAGCAAGCGAACGGGCAATTTATAGATAAACTA
 GTAGAATCTGTGATGAAGCTCTGCCTTATCATGGCTAAGTATAGCAACGATGGGGCAGCCCTTGTGAGT
 TGGAGAACAAGCAGCCTCGGCAATAAGCCCAATTTACGGGGCACCAGATGCATTACAGTGGTGAAT
 GCCACAGAACTATCAAGACTCTTTGGACATGAAGTAATTGTCAATAATCAGTGTCTACAAATAGCTTG
 CAGAAGCAGCTCCAGGCTGTCTGCAGTGGATTGCAGCCTCCAGTTTAACTGCCCCATGCTCTACTTCA
 TGGGAGATAAGGATGGACAACCTGAAAAGCTTCTCAGGTTTTCAGCTAAAGCAGCAGAGAAGGGGTACAG
 TGTAGGAGGTCTTCTTCAAGAGGTGATGAAGTTTGCCAAGGAACGGCAACCAGATGAAGCTGTGGGAAAG
 GTGGCCAGGAAACAGTTGCTGGACTGGCTGCTCGCTAACCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221765 representing NM_003886
 Red=Cloning site Green=Tags(s)

MMAYSDDTMMSSDDIDWLRSHRGVCKVDL YNPEGQQDQDRKVICFVDVSTLNVEDKDYKDAASSSSEGNLNL
 LGSLEEKEIIVIKDTEKKDQSKTEGSVCLFKQAPSDPVSVLNWLSDLQKALGFQHALSPSTSTCKHKV
 GDTEGEYHRASSENCYSVYADQVNIDYLMNRPQNLRLMNTAAKNTNNNQSPSAPPAPKPPSTQRAVISP
 DG ECSIDDL SFYVNR LSSLVIQMAHKEIKEKLEKSKCLHHSICPSPGNKERISPRTPASKIASEMAYEAVE
 LTAAEMRGTGEESREGGQKSFLYSEL SNKSKSGDKQMSQRE SKEFADSI SKGLMVYANQVASDMMVSLMK
 TLKVHSSGKPIPASVVLKRVLLRHTKEIVSDLIDSCMKNLHNITGVLMTDSDFVSAVKRNLNFNQWKQAT
 DIMEAMLKRLVSAIGEEKETKSQSLSYASLKAGSHDPKCRNQSLFSTMKAEMKERDKGKMSDPCKSL
 TSAEKVGEHILKEGLTIWNQKQGNCKVATKACSNKDEKGEKINASTDSLAKDLIVSALKLIQYHLTQQT
 KGKDTCEEDCPGSTMGYMAQSTQYEKCGGGQSAKALSVKQLESHRAPGPSTCQKENQHLSQKMDMSNIV
 LMLIQKLLNENPFKCEDPCEGENKCSEPRASKAASMSNRSDKAEQCQEHQELDCTSGMKQANGQFIDKL
 VESVMKLCIMAKYSNDGAALAELEEQAASANKPNFRGTRCIHSGAMPQNYQDSL GHEVI VNNQCSTNSL
 QKQLQAVLQWIAASQFNVPL YFMGDKDGLKLEKLPQVSAKAAEKGYVGGLLQEVMKFAKERQPDEAVGK
 VARKQLLDWLLANL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8100_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

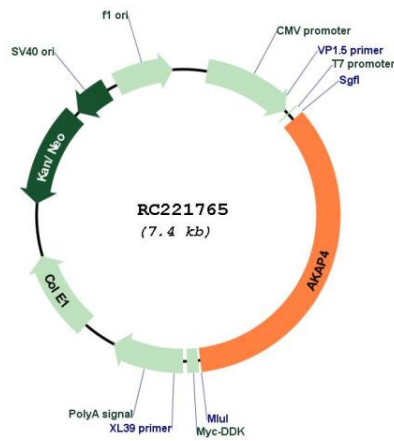


* The last codon before the Stop codon of the ORF

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|-------------------------------|--|
| ACCN: | NM_003886 |
| ORF Size: | 2562 bp |
| OTI Disclaimer: | <p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p> |
| 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: | <ol style="list-style-type: none"> 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_003886.3 |
| RefSeq Size: | 2881 bp |
| RefSeq ORF: | 2565 bp |
| Locus ID: | 8852 |
| UniProt ID: | Q5JQC9 |
| Cytogenetics: | Xp11.22 |
| Protein Families: | Druggable Genome |
| MW: | 94.48 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 is localized to the sperm flagellum and may be involved in the regulation of sperm motility. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC221765