

## Product datasheet for **RC207199**

### **AKAP3 (NM\_006422) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AKAP3 (NM_006422) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AKAP3
Synonyms:	AKAP 110; AKAP110; CT82; FSP95; HEL159; PRKA3; SOB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC207199 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCAGAAAAGTTGACTGGTTACAAAGCCAAAATGGAGTATGCAAAGTTGATGTCTATTCTCCTGGAG  
 ACAACCAAGCCCAGGACTGGAAAATGGACACCTCCACGGATCCTGTCAGAGTGCTCAGCTGGCTCCGCAG  
 AGACCTGGAGAAGAGTACAGCAGAGTTCCAAGATGTTTCGGTTCAAACCCGGAGAATCATTGGTGGGAA  
 ACGTCCAACCTCAGGAGACCCACACAAAGGTTTCTCTGTAGACTATTACAACACCACCACCAAGGGCACTC  
 CAGAAAGATTGCATTTTGGAGTACTCACAAGAGATTCTTGCCAGGGCCCCAGGGCCAACTTGGCAA  
 CGAGAGTTCAGTAGATGAAGTTTCTTCTATGCTAACCCTCACGAATCTAGTCATAGCCATGGCCCGC  
 AAAGAGATCAATGAGAAGATCGATGGCTCTGAAAACAAATGTGTCTATCAGTCATTGTACATGGGAATG  
 AACCCACACCCACAAAAGCCTCAGTAAGATAGCATCAGAGCTTGTGAATGAGACCGTCTCTGCATGTT  
 CAGGAATGCTGCCCAGACAAGGCTCCTGGCTCTGGAGACAGAGTCTCAGGATCATCACAAGTCCCCCA  
 AATTTGAAATACAAGTCCACTTTGAAGATCAAGGAGAGCACCAAAGAAAGACAGGGTCCAGATGACAAGC  
 CTCTTTAAGAAGTCTTTCTTCTATAAGGAAGTGTGTAATCTCGTAACGGAGATTATGCCAGAGAGGG  
 TGGAAAGTTCTTCTCGGGAGAGAAAAGAGTTTCGAGGGCAGGAAAGGCCTGATGACTTACGGCTTCT  
 GTTAGTGAAGGGATCATGACCTATGCTAACAGTGTGGTATCTGATATGATGGTCTCCATCATGAAGACAC  
 TGAAGATCCAAGTGAAAGACACAACCATGGCCACCATCTACTGAAGAAGTTCTGCTCAAGCATGCAAA  
 AGAGGTGGTCTCGGATCTCATCGACTCCTTCTTGAGGAATCTCCACAGCGTCACAGGGACCTCATGACT  
 GACACACAGTTTGTCTCGGCTGTGAAAAGAAGTGTCTTCTCATGGAAGCCAAAAGGCCACAGATATCA  
 TGGATGCCATGCTAAGGAAGCTGTACAATGTAATGTTTGGCAAGAAAGTCCCTGAGCATGTCAGGAAAGC  
 CCAAGACAAGGCTGAGAGTTATTCCTCATCTCCATGAAAGGAATGGGTGATCCTAAAAACCGAAATGTG  
 AACTTTGCCATGAAATCTGAAACTAAATTTGAGAGAAAAAATGATTCTGAACCCAAATCAGAGGAGGAGA  
 CTTGTGCGAAAATCTGGGTGAGCACATTATCAAAGAGGGGCTTACCCTGTGCCATAAAAGTCAAGAGAA  
 AGAATGTAATCTCTAGGTTTCCAGCATGCAGCATTGGAAGCTCCCAACACACAGCGTAAGCCTGCATCA  
 GACATTTCTTTGAGTACCCTGAAGATATTGGCAACCTCAGCCTTCTCCATATCTCCAGAGAAACCTG  
 AGAATTTTATGTATGATTAGACTCCTGGGCAAGGACCTGATCGTGTCTGCCCTGCTTCTGATTCAATA  
 TCACCTGGCCCAGGGAGGAAGAAGGGATGCACGGAGCTTCGTTGAAGCTGCTGGCACCACCAACTTCTCT  
 GCCAATGAACCTCCTGTAGCTCCGATGAATCTTGCCTTAAGTCTGCTCCATTGTAGGTGACCAAGAAC  
 AAGCAGAAAAGAAGGACCTAAGGAGTGTCTTTAATTTTCAATCCGGAACCTACTTAGTGAGACCATTTT  
 CAAGCGTGACCAGAGCCCTGAACCAAGGTGCCGGAACAGCCAGTTAAGGAAGATAGGAAGTTGTGTGAA  
 AGACCGTTGGCGTCTTCTCCCCCAGGCTATATGAGGATGATGAGACCCCTGGTGCCTTCTGGGCTGA  
 CCAAGATGGTGTGAGCCAGATAGATGGCCACATGAGTGGGAGATGGTGAACATCTGATGAACTCAGT  
 GATGAAGCTGTGTGCATCATTGCTAAGTCTGTGATGCTTCGTTGGCAGAGCTGGGAGATGACAAGTCT  
 GGAGATGCCAGTAGGCTAACTTCGGCTTCCCAGATAGTTTATATGAGTGCTTACCAGCCAAGGGCACAG  
 GGTCAGCAGAAGCTGTCTGCAGAATGCCTATCAAGCTATCCATAATGAAATGAGAGGCACATCAGGACA  
 GCCCCTGAAGGGTGTGCAGCACCCACGGTATTGTCAGCAATCACAACCTAACGGACACAGTTCAGAAC  
 AAGCAACTCCAAGCCGTCTCCAATGGTGTAGTGCCTCTGAGCTCAATGTCCCTATTTTGTATTTTGTCTG  
 GTGATGATGAAGGGATCCAGGAGAAGCTACTTCAGCTCTCAGCTGCTGCTGTGGACAAAAGGATGCAGTGT  
 GGGCGAGGTTCTGCAGTCGGTGTGCGCTATGAGAAGGAGCGCCAGCTGAATGAGGCGGTGGGAAATGTC  
 ACACCGCTGCAGCTGCTGGACTGGCTGATGGTGAACCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207199 protein sequence  
 Red=Cloning site Green=Tags(s)

MSEKVDWLQSQNGVCKVDVYSPGDNQAQDWKMDTSTDPVRVLSWLRDLEKSTAEFQDVRFKPGESFGGE  
 TSNSGDPHKGFSVDYYNTTKGTPERLHFEMTHKEIPCQGPRAQLGNESSVDEVSYFANRLTNLVIAMAR  
 KEINEKIDGSENKCVYQSLYMGNEPTPTKLSKIASELVNETVSACSRNAAPDKAPGSGDRVSGSSQSPP  
 NLKYKSTLKIKESTKERQGPDDKPPSKKSFYKVEVFESRNGDYAREGGRFFPRERKRFRGQERPDFTAS  
 VSEGIMTYANSVSDMMYSIMKTLKIQVKDTTIATILLKKVLLKHAKEVSDLIDSFLRNLHSTVGTLMT  
 DTQFVSAVKRTVFSHGSQKATDAMDAMLRKLYNVMAKKVPEHVRKAQDKAESYSLISMKGMDPKNRNV  
 NFAMKSETKLREKMYSEPKSEEETCAKTLGEHIIKEGLTLWHKSQQKECKSLGFQHAAFEAPNTQRKPAS  
 DISFEYPEDIGNLSLPPYPPEKPFENFMYDSDSWAKDLIVSALLLIQYHLAQGGRRDARSFVEAAGTTFNP  
 ANEPPVAPDESCLKSAPIVGDQEAQEKDLRSVFFNFIRNLLSETIFKRDQSPEPKVPEQPVKEDRKLCE  
 RPLASSPRLYEDDETPGALSGLTKMAVSQIDGHMSGQMV EHLMNSVMKLCVIIAKSCDASLAELGDDKS  
 GDASRLTSAFPDSLYECLPAKGTGSAEAVLQNA YQAIHNEMRGTSGQPPEGCAAPTIVSNHNLTDTVQN  
 KQLQAVLQWVAASELNPILYFAGDDEGIQEKLQLSAAAVDKGCSVGEVLQSVLRYEKERQLNEAVGNV  
 TPLQLLDWLMVNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6712\\_d11.zip](https://cdn.origene.com/chromatograms/mk6712_d11.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

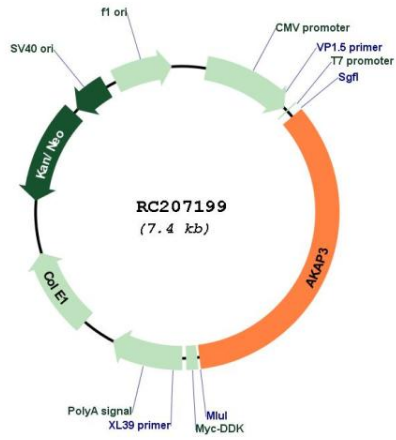
Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_006422
<b>ORF Size:</b>	2559 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_006422.3</a>
<b>RefSeq Size:</b>	3323 bp
<b>RefSeq ORF:</b>	2562 bp
<b>Locus ID:</b>	10566
<b>UniProt ID:</b>	<a href="#">O75969</a>
<b>Cytogenetics:</b>	12p13.32
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	94.8 kDa
<b>Gene Summary:</b>	This gene encodes a member of A-kinase anchoring proteins (AKAPs), a family of functionally related proteins that target protein kinase A to discrete locations within the cell. The encoded protein is reported to participate in protein-protein interactions with the R-subunit of the protein kinase A as well as sperm-associated proteins. This protein is expressed in spermatozoa and localized to the acrosomal region of the sperm head as well as the length of the principal piece. It may function as a regulator of motility, capacitation, and the acrosome reaction. [provided by RefSeq, May 2013]

Product images:



Circular map for RC207199