

## Product datasheet for **RR204698**

### **Akap1 (NM\_053665) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Akap1 (NM_053665) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Akap1
Synonyms:	Akap84
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide  
Sequence:**

>RR204698 representing NM\_053665  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCAATCCAGTTCGCTCACTTCCCTTGGCCTTGCTGGAATGCTAGCACTCCTTGCTGGTGGT  
 GGTTTTCTCTCGTAAAAAGATCGGCTCAGCAGCAATGGCAAGCAGGTGGGACATTGAAGTTGGCC  
 TGCCATCGAGGACCGACTGCCACTGAAGAGGCCTGTCTGGAGTCTGTCTGTGACCCCACTGTGAC  
 CAGCCTCTGAAAGGAAGAGCAGCGCTCTATGGACAGGCCTCTTTCAGATCCCCAGCCTTGCCAAAG  
 CCCGTCAAGTTCGCCAAGATCAGAGTCTCAGGCAACCTCCCCAGCATTGTAGACACAAGGTTGCAGG  
 AGGACAGTGCAGCGATGAGAATCAAAGTGGTACTCTCCCTGATGGGGACGAAGCCAAATCTATTCT  
 CTTGGACGTCCGCTTTCCCAAAGGATCTGTCTTCCCTATGAAGCAGTGAAGGGTGAAGCAAGAGT  
 CTGCCCTGGGCAGAACTCTGGGAGAGGCTGGCTAAGCCAGTGTGCAGCCTCTGGAGAGAACCGAGAG  
 GACGGGTGGGGCGAAGGACTGGAGATGCTGTGTTGGGGAAAGTGTACTTGAGGAAGGCCTATTGCC  
 CAGGAGTGTGTTTCAAGTAGAGAAGAGTGAAGTTCCGATCCTAGCTCCCGGGGAGGCGGGGAGAGA  
 AGGTGAGAAGTGGCCACCACAGGTAGATGAGCTTTAAAGAAGGAAGAATATATTGTTGGGAAGTTGCC  
 AAGTAGCTTTGTGGGCCAGTTCCTCGGAGCTGGTAAAGGATGAGGGTGCCTGCTACCCCAAGTCAA  
 GGTAGCCAGGACAGAAGCCTGGCTAGAGAACTGGACAAAGACAAGACCTTGCCTGAAAAGGACCAGATT  
 AGCAGACTGCCTTCCAGATCATCTCCAGGTGATCTTGAAGCGACTGAAGAGATACGGGCCACACAGT  
 GGGCAAGACTGTGGCACAAGTGCATCAACCCCGGCACTCAGCCTCAGGGCAGGAGGAGAGCTGTGTC  
 CCAGCCAGCCAGGAACTAGCTTGGGACAAGAAATCCCAGATCTGCTTCCACCAGAAGCAGTGCCTG  
 CCAGCCCTCAGCAGGAGCCCCACCACCAAGACCTATGTGAGCTGTCTCAGCAGTCTCTGTGACGCC  
 CACCAAGGACCAGAAGCCAAAGAACTCTGCACACCACATCTCCCTGGCTCCCTGCCACCAGCAGTTACC  
 CCCAGAGGCAGTCTCTGGATGGGCAAGTAACCCGAGAGGTGATGACACCTTTGTCACCTGTACGTCCA  
 ACAACAGCCAGAGTGTCTTTTCAAGTACCTCCTTGGGGTGTGCTCAGACCCTGTGACTTTCGAGGCT  
 TGAAGACTCTTGACAGAGACCATCTCAAGCTCCGGAGACAAAGCTGTACCCCAAGTCCAGACAGT  
 ACTGAGCCCTTCAAGATGGGGTGTGAAGGAGGATTTGTCAGACTTGGGACCGAGGATGGATGGACCA  
 TGGATACAGAAGCAGATCATTCAAGGAGTCTGACGGAAACAGTATGGATTGATGATGATGTTGTTGG  
 GCTTACGAAACCTGATAGCCCCAGACTGTCCAGGAGGCTCAACCCCTAAGAAGTTGACCTCATCATC  
 TGGGAGATCGAGGTGCCAAGCATTTAGTTGGTCGACTGATTGGCAAGCAGGGACGGTACGTGAGTTTC  
 TGAAGCAGACGTCTGGTGCCAAGATCTACATCTCCACCCTGCCTTACACACAGAATCCAGATCTGCCA  
 CATAGAAGGCTCTCAGCATCATGTGGACAAAGCTCTGAACCTGATTGGGAAGAAGTTAAGGAGGTGAAC  
 CTCACCAATATCTATGCACCACCGCTGCCTTCTTGGCACTGCCTTCCCTGCCGATGACATCGTGGCTCA  
 TGCTGCCTGATGGTATCACTGTGGAAGTCACTGGTCAACCAGGTCAATGCTGGGCACCTATTTGTACA  
 GCAACACACACACCCACCTTCCACGCACTGCGCAGCCTGGACCAGCAGATGTACCTCTGTTACTCTCAG  
 CCTGGAATCCCCACCTTGGCCACCCAGTGAAATAACGGTTATCTGCGCTGCCCTGGTGGGACGGGG  
 CCTGGTGGCGAGCCCAAGTAGTGGCTCCTATGAGGAGACCAATGAGGTGGAGATTGCTACGTGGACTA  
 TGGTGGATATAAGAGGGTGAAGTGCAGCTGCTCCGCAAAATAGGTCTGACTTTGTGACCTGCCATTC  
 CAAGGAGCAGAAGTCTTCTGGACAGTGTGGTTCCGCTGTCAGATGATGATCACTTTTACCCGAGGCAG  
 ACGCAGCCATGAGTGAGATGACAGGCAATACAGCACTGCTGGCCAGGTGACAAGCTACAGTGGCAGTGG  
 CCTTCTCTGATTGAGTGTGGTGGAGATGAAGTGGTGTGATAAACCGGCTCGCTGGTGGAG  
 CGGGCCCTGGCACAGTGGGTAGACAGCTGCTATGCCAGCCTT

**ACCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR204698 representing NM\_053665  
Red=Cloning site Green=Tags(s)

MAIQFRSLFPLALPGMLALLGWWFFSRKKDRLSSNGKQVGTLLKVGPAIEDRLPTEEACPGVLSVTPSVT  
QPPGKEEQRSMDRPLSDPPALPRTRQVRRRSESSGNLPSIVDTRLQAGQCSDENSKVVL SLMGDEAKSIP  
LGRPLFPKDL SFPYEAVEGCKQESALGRTPGRGWL SQAASGENARETGGAEGTGDVAVLGESVLEEGLLP  
QECVSEVEKSEFPILAPGGGGGKVRSGPPQVDELLKKEEYIVGKLPSSFVGPVHSELVKDEGALVPQVK  
GSQDRSLARELDKDKTLPEKDQIEQTAFAQIISQVILEATEEIRATTVGKTV AQVHPTPGTQPQGQEEESC  
PASQETSLGQEI PDPASTRTGATASPSAGAPPKTYVVSCLSSPLSGPTKDQKPKNSAHHISLAPCPPVT  
PQRQSLDGASNPRGDDTFVTCTSNNSQSVLSVTSGLGCSDPVSTSRLEDSCTETISSSGDKAVTPPLPDS  
TEPFSNGVLKEELSDLGTEDGWTMDTEADHSGGSDGNSMDSVDSGCCGLTKPDSPQTVQAGSNPKKVDLII  
WEIEVPKHLVGRLIGKQGRYVSFLKQTSGAKIYISTLPYTQNIQICHIEGSQHHVDKALNLIGKKFKELN  
LTNIYAPPLPSLALPSLPMTSWLMLPDGITVEIVVNQVNAGHLFVQHTHPTFFHALRSLDQQMYLCYSQ  
PGIPTLPTPVEITVICAAPGADGAWWRAQVVASYEETNEVEIRYVDYGGYKRVKVDVLRQIRSDFTLFP  
QGAEVLLDSVVPLSDDHFSPEADAAMSEMTGNTALLAQVTSYSATGLPLIQLWSVVGDEVVLINRSLVE  
RGLAQWVWVDSYASL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

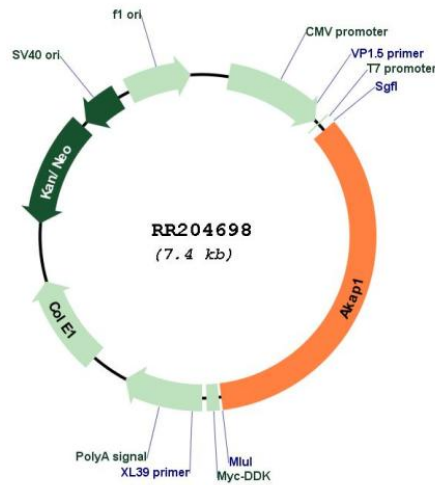
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

Plasmid Map:



<b>ACCN:</b>	NM_053665
<b>ORF Size:</b>	2562 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_053665.1</a> , <a href="#">NP_446117.1</a>
<b>RefSeq Size:</b>	2621 bp
<b>RefSeq ORF:</b>	2565 bp
<b>Locus ID:</b>	114124
<b>UniProt ID:</b>	<a href="#">O88884</a>
<b>Cytogenetics:</b>	10q26
<b>MW:</b>	91.7 kDa
<b>Gene Summary:</b>	scaffolding protein that immobilizes and concentrates protein kinase A II (PKAII) isoforms at specific intracellular locations [RGD, Feb 2006]