

## Product datasheet for MR224507

### Akap7 (NM\_018747) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Akap7 (NM_018747) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Akap7
Synonyms:	6430401D08; AI662165; AKAP15; Akap18; BB170514
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224507 representing NM_018747 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGTTTGCTGCTGTAGATATCAAGATGACTGTGGAAGCCCTGATGTACCTCAAGCAAACCCAAAGA  
GAAGCAAAGAAGAAGAAGATAGAGGCGACAAGAATGATCATGTGAAGAAGAGGAAAAAGCCAAAA  
AGATTATCAGCCCACTATTTCTGTCCATTCGATCACCAACAAAAAGATTACAACCGGAATTAAGTC  
TTGCAAATTCGATACTACAGCAGGATAAGCGACTGACCAAAGCCATGGTGGCGACGGCTCCTTTCATA  
TTACCTTGCTAGTGATGCAGTTATTAACGAAGATGAAGTAAATATCGGTACCGATGCACCTTTTGAATT  
GAAGCCATTCGTTGAGGAGATCCTTGAAGGAAACACTTGGCTTTGCCCTTCAAGGGATTGGCACTTTC  
CAAGGTCAGGTTGGCTTTGTGAAGCTGGCAGATGGAGACCATGTTAGCGCACTCCTGGAGATAGCAGAGA  
CTGCGAAAAGAACATTTGCGGAAAAAGGCATCCTAGCTGGAGAAAAGCAGAACTTTTAAGCCCCACCTGAC  
CTTTATGAAGCTGTCAAAGCACCGATGCTCAGGAAGAAGGGAGTGAGAAAAATCGAGCCTGGATTGTAT  
GAACAATTTATCGACCACAGATTTGGAGAAGAACTATTGTACCAGATAGATCTCTGCTCCATGCTGAAGA  
AAAAACAGAGCAATGGTTATTACCACTGTGAGTCTTCCATCGTGATCGGTGAGAAGGACCGAAGGGAGCC  
TGAGGATGCTGAAGTGGTCAGGCTCAGTAAGAGGCTGGTGGAGAACGCCGTGCTCAAGGCTGTCCAGCAG  
TACCTAGAAGAGACGCAGAACAAAAAGCAGCCAGGGGAGGGAACTCCACCAAAGCTGAGGAGGGAGATC  
GGAATGGTGATGGCAGTGATAACAACCGGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR224507 representing NM\_018747  
Red=Cloning site Green=Tags(s)

MPFAAVDIQDDCGSPDVPQANPKRSKEEEEDRGDKNDHVKKRKKAKKDYQPNYFLSIPITNKKITTGIKV  
 LQNSILQQDKRLTKAMVGDGFSFHITLLVMQLLNEDEVNIGTDALLELPFVEEILEGKHLALPFQIGITF  
 QGQVGFVKLADGDHVSALLEIAETAKRTRFREKGILAGESRTFKPHLTFMKLSKAPMLRKKKGVRKIEPGLY  
 EQFIDHRFGEELLYQIDLCSMLKKKQSNGYHCESSIVIGEKDRREPDAELVRLSKRLVENAVLKAVQQ  
 YLEETQNKKQPGEGNSTKAEEDRNGDGSDDNRK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9045\\_g08.zip](https://cdn.origene.com/chromatograms/mm9045_g08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_018747

**ORF Size:** 942 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.
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\\_018747.5](#)

**RefSeq Size:** 3140 bp

**RefSeq ORF:** 945 bp

**Locus ID:** 432442

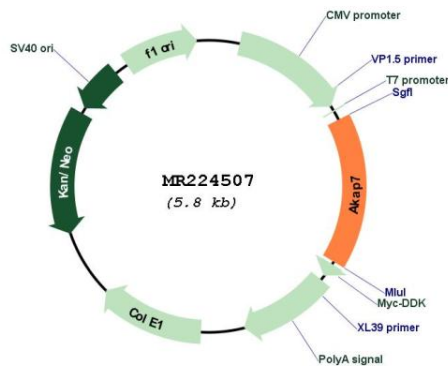
**UniProt ID:** [Q7TN79](#)

**Cytogenetics:** 10 A4

**MW:** 35.9 kDa

**Gene Summary:** Targets the cAMP-dependent protein kinase (PKA) to the plasma membrane, and permits functional coupling to the L-type calcium channel. The membrane-associated form reduces epithelial sodium channel (ENaC) activity, whereas the free cytoplasmic form may negatively regulate ENaC channel feedback inhibition by intracellular sodium (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR224507