

## Product datasheet for **RG205349**

### **AKAP8 (NM\_005858) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AKAP8 (NM_005858) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AKAP8
Synonyms:	AKAP-8; AKAP-95; AKAP 95; AKAP95
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG205349 representing NM\_005858  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGGATCGCC

ATGGACCAGGGCTACGGAGGCTACGGGGCGTGGAGTGCTGGACCTGCCAACACCCAGGGTGCATATGGAA  
CTGGTGTGGCCAGCTGGCAAGGTTATGAAAACACAATTAATGCGGCCAGAACACCAGTGTACCAC  
AGGCGCAACCTACAGCTACGGCCAGCCTCGTGGGAGGCCGCAAGGCCAATGATGGCGGCTGGCGGCC  
GGGGCCCTGCCATGCACATGGCCTCTTACGGCCAGAGCCATGCACCGACAATTCGACTCCCTCATTG  
CCAAGATCAACCAGCGTTTGGACATGATGTCCAAGGAAGGAGGCAGGGGCGGGAGCGGGCGGTGGGGA  
GGGCATACAGGACCGGGAGAGCTCCTCCGCTTCCAGCCGTTTCGAGTCTATGACTCCAGGCCCTGCCTG  
CCGGAGACAACCCCTACCGCCCAGCTACAGCTACGACTATGAGTTCGACCTGGGGTCCGACCGCAATG  
GCAGCTTTGGGGGCGAGTACAGTGAATGCCGAGACCCAGCCGGGAGCGGGGCTCCCTTGATGGCTTCAT  
GCGGGGCGGGCCAGGGCCGCTTCCAGGACCGGAGCAACCTGGCACCTTCATGCGCAGCGACCCCTTC  
GTGCCCCCGCTGCGTCTCTGAGCCCCGTCCACGCCCTGGAACGAGCTGAACTACGTGGTGGACGGG  
GCCTGGGAGGGCCCTCCCCAGCCGGCCACCTCCGTCCCTCTTCTCCAGTCCATGGCTCCCGACTACGG  
CGTGATGGGCATGCAGGGGGCGGGCGGCTATGACAGCACCATGCCCTACGGATGTGGCCGCTCGCAGCCT  
CGGATGCGGGATCGGGATCGGCCAAGAGGAGAGGGTTTGACCGCTTCGGACCAGATGGCACGGGACGGA  
AACGGAAGCAGTTCACCTTTACGAGGAGCCAGACACCAAACCTGGCCCGGTTGACAGTGAAGGAGATTT  
CTCCGAAAATGATGACGCAGCTGGTGACTTCCGCTCAGGAGATGAAGAATTAAGGGTGAAGATGAACCT  
TGCGACTCTGGGAGGCAAAGAGGAGAGAAGGAGGACGAGGACGAGGATGTGAAGAAGAGAAGGGAAAAGC  
AAAGGAGAAGAGACAGGACGCGGGACCGTGCAGCCGACAGAATTCAGTTTGCCTGTTCTGTATGCAAGTT  
CCGTAGCTTTGATGACGAAGAGATCCAGAAGCATCTGCAAAGCAAATTCACAAAGAGACCCTGCGGTTT  
ATAAGCACAAGCTGCCCGACAAGACCGTGGAGTTCCTCCAGGAATACATTGTAACAGAAAATAAGAAAA  
TTGAGAAGCGGCGTCAGGAATTGATGGAGAAAAGAAACCGCAAACCAAACCCAGATCCTTTCAAAGGGAT  
TGGCCAGGAGCACTTCTCAAGAAGATCGAGGCTGCTCACTGCCTGGCCTGCGACATGCTAATTCCTGCA  
CAGCCGCAGCTCCTCCAGCGCACCTGCACTCCGTGGACCACAATCACAACCGCAGGTTGGCTGCTGAAC  
AGTTCAAGAAAACCACTCCATGTGGCTAAGAGTGTGTTGAACAACAGACATATAGTGAAGATGCTGGA  
AAAATACCTCAAGGGTGAAGACCCTTCCACAGTGAACCTGTTGATCCAGAAATGGAAGGAGATGACAAT  
TTAGGAGGTGAGGATAAGAAAGAGACACCTGAGGAGGTGGCCCGGACGCTTAGCAGAGGTGATTACAG  
CAGCAGTGAGGGCCGTAGATGGGGAAGGAGCGCCGCTCCAGAGAGCAGCGGGGAGCCGCTGAGGACGA  
AGGCCCCACGGACACAGCGGAGGCGGTAGTGATCCTCAAGCCGAACAGCTGCTGGAAGAGCAGGTGCC  
TGTGGAACGGCACATGAGAAGGGCGTCCCAAGGCCAGAAGTGAAGGCTGCAGAGGCTGGAATGGCGCCG  
AGACAATGGCAGCAGAGGCAGAAAGTGCCCAAACAGAGTTGCTCCTGCCCCAGCTGCCCGGGATGCTGA  
AGTGAACAAAATGATGCAGAGTCTAAAGACGCTGTTCCACAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG205349 representing NM\_005858  
 Red=Cloning site Green=Tags(s)

```

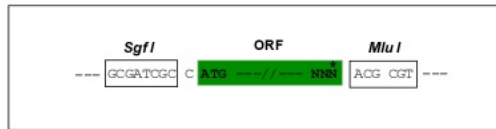
MDQGYGGYGAWASAGPANTQGAYGTGVASWQGYENYNYGAQNTSVTTGATYSYGPASWEAAKANDGGLAA
GAPAMHMASYGPEPCTDNSDSLIAKINQRLDMMSKEGGRGSGGGGEGIQDRESSFRFPFESYDSRPCL
PEHNYPYRPSYSYDYFDLGSDRNGSFGGQYSECRDPAERERGLDGFMRGRGQGRFQDRSNPPTFMRSDPF
VPPAASSEPLSTPWNELNYVGGRLGGPSPSRPPPSLFSQSMAPDYGVMGMQAGAGGYDSTMPYGCGRSQP
RMRDRDRPKRRGDFRFGPDGTGRKRKQFLYEEPTKLARVDSEGDFSENDDAAGDFRSGDEEFKGEDEL
CDSGRQRGEKEDEDEDVKKRREKQRRDRTRDRAADRIQFACSVCKFRSFDDEEIQKHLQSKFHKETLRF
ISTKLPDKTVEFLQEYIVNRNKKIEKRRQELMEKETAKPKPDPFKGIGQEHHFKKIEAAHCLACDMLIPA
QPQLLQRHLHSDHNHNRRLAAEQFKKTSLVHAKSVLNNRHIVKMLEKYLKGEDPFTSETVDPPEMEGDDN
LGGEDKKETPEEVAADVLAEVITAAVRAVDGEGAPAPESSGEPAEDEGPTDTAEAGSDPQAEQLLEEQVP
CGTAHEKGVPKARSEAAEAGNGAETMAAEASQAQTRVAPAPAAADA EVEQTDAESKDAVPT
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_005858

**ORF Size:** 2076 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_005858.4](#)

**RefSeq Size:** 3549 bp

**RefSeq ORF:** 2079 bp

**Locus ID:** 10270

**UniProt ID:** [O43823](#)

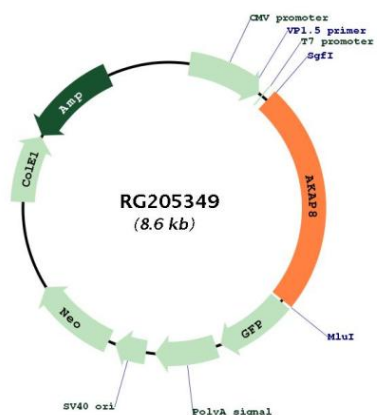
**Cytogenetics:** 19p13.12

**Domains:** AKAP95

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a member of the A-kinase anchor protein family. A-kinase anchor proteins are scaffold proteins that contain a binding domain for the RI/RII subunit of protein kinase A (PKA) and recruit PKA and other signaling molecules to specific subcellular locations. This gene encodes a nuclear A-kinase anchor protein that binds to the RII alpha subunit of PKA and may play a role in chromosome condensation during mitosis by targeting PKA and the condensin complex to chromatin. A pseudogene of this gene is located on the short arm of chromosome 9. [provided by RefSeq, May 2011]

Product images:



Circular map for RG205349