

Product datasheet for RC219968

AKAP7 (NM_016377) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AKAP7 (NM_016377) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AKAP7
Synonyms:	AKAP15; AKAP18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219968 representing NM_016377 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCAGAGGAATTTGAAGCCAATACTATGGATTCTCTGGTAGACATGCCATTTGCTACTGTAGATATTC
AGGATGACTGTGGAATCACTGATGAACCTCAAATAAATTTGAAGAGAAGTCAAGAAAATGAATGGGTCAA
GAGTGATCAAGTAAAGAAGAGGAAAAAAAAAGAGAAAAGATTATCAACCCAACTATTTCTGTCCATTCCA
ATCACCAACAAAGAGATTATAAAAGGAATTAAGATCCTGCAGAATGCAATAATACAACAAGATGAGCGAC
TGGCCAAAGCAATGGTCAGTGATGGTTCCTTTTCATATTACCTGCTGGTATGCAATTATTAATGAAGA
TGAAGTAAACATTGGTATTGATGCTCTTTTGAATTGAAACCATTATAGAAAGAACTCCTCAGGGAAAA
CATTTGACTTTGCCCTTTCAAGGGATTGGTACTTTTGGAAATCAGGTTGGATTTGTGAAGCTGGCAGAAG
GAGATCATGTAACTCACTTTTGGAGATAGCAGAGACTGCAAAATAGGACATTTCAAGAAAAAGGCATCCT
GGTAGGAGAGAGCAGAAGTTTTAAACCTCATTTGACCTTCATGAAGTTGTCAAAATCACCGTGGCTCCGT
AAGAATGGAGTGAAGAAAAATAGATCCTGATTTATATGAAAAGTTTATCAGTCACAGATTTGGAGAAGAAA
TATTATATCGCATAGATCTTTGCTCCATGCTGAAGAAAAACAAAGTAAATGGTTATTACTGTGAATC
TTCCATTTGATTGGTGAAGAAACGGAGGGGAGCCCGATGACGCTGAACTAGTAAGGCTCAGTAAGAGG
CTGGTGGAGAACGCGGTGCTCAAGGCTGTCCAGCAGTATCTGGAGGAAACACAGAATAAAAAACAGCCGG
GGGAGGGGAGCTCTGTGAAAACCGAAGCAGCTGATCAGAATGGCAATGACAATGAGAACAACAGGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219968 representing NM_016377
Red=Cloning site Green=Tags(s)

MSEEF EANTMDSLVDMPFATVDIQDDCGITDEPQINLKRSQENWVKSDQVKKRKKRKYQPNYFLSIP
 ITNKEI IKGILQNAIIQQDERLAKAMVSDGSFHITLLVMQLLNEDEVNIGIDALLELPFIEELLQ GK
 HLTLPFQIGTFGNQVGFVKLAEGDHVNSLLEIAETANRTFQEKGILVGESRSFKPHLTFMKLSKSPWLR
 KNGVKKIDPDLYEKFI SHRFGEEL YRIDLC SMLK KKKQSN GYYHCES SIVIGEKNGGEPDDAELVRLSKR
 LVENAVLKAVQQYLEETQNKNPGE GSSVKTEAADQNGNDNENNRK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3903_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016377

ORF Size: 978 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_016377.2](#), [NP_057461.1](#)

RefSeq Size: 2821 bp

RefSeq ORF: 1047 bp

Locus ID: 9465

UniProt ID: [Q9P0M2](#)

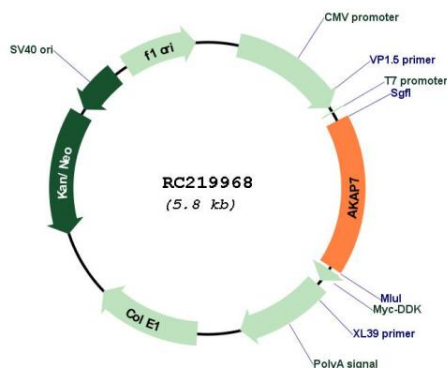
Cytogenetics: 6q23.2

Protein Families: Druggable Genome

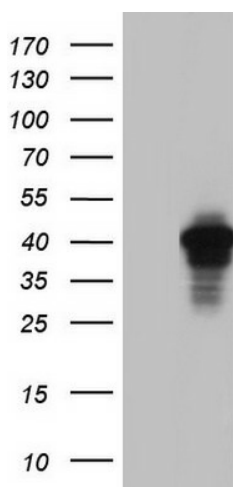
MW: 36.9 kDa

Gene Summary: This gene encodes a member of the A-kinase anchoring protein (AKAP) family, a group of functionally related proteins that bind to a regulatory subunit (RII) of cAMP-dependent protein kinase A (PKA) and target the enzyme to specific subcellular compartments. AKAPs have a common RII-binding domain, but contain different targeting motifs responsible for directing PKA to distinct intracellular locations. Three alternatively spliced transcript variants encoding different isoforms have been described.[provided by RefSeq, Apr 2011]

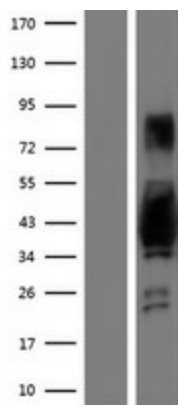
Product images:



Circular map for RC219968



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY AKAP7 (Cat# RC219968, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AKAP7 (Cat# [TA804819]). Positive lysates [LY429496] (100ug) and [LC429496] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413981]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219968 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).