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Product datasheet for MR222020

Akap10 (NM_019921) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Akap10 (NM_019921) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Akap10
Synonyms:	1500031L16Rik; B130049N18Rik; D-AK; D-AKAP-2; D-AKAP2; PRKA10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR222020 representing NM_019921
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGGGAGCCGGGCCCTCCCCGCGACACTCCCCCCGCGCCCTCCGCCCCGACCCGGGCCCCGCCATGT
CCTTCTTCCGGCGGAAAGTGAAAGGTAAAGAGCAAGAGAAGACCTTAGATGTCAAGTCCACTAAAGCTTC
AGTAGCCGTACATTCCCCACAAAAAAGCACTAAAAATCATGCCTTGCTGGAGGCTGCAGGACCAAGTCAT
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AGCCAAGCCACATGGAGGCTGCTCATTTTGGAGACCTAGGCAGATCCTGTCTGGACTATCAGACTCAAGA
GACCAAATCCAGTCTTTCAAAGACCCTTGAACAAGTCTTGCGTGACACTGTTGTCCTTCCATATTTCCTT
CAGTTTATGGAACTTCGGAGAATGGAGCACCTGGTGAAATTTTGGTTAGAGGCTGAAAGTTTTCACTCTA
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ACCACTTGCTGCTTTCCCAGGAAGGCCACAGTGCCCGTTCTCTCCATCGTGAGGTGGCCAGAACAGGAAG
TCATCAGATTCCCACCGACTCCCAGGACTCCTCCTCCAGACTTGCAGTAGGCAGTAGAAACAGTTGCTCT
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AATATATATCTCCAGATGCTGCTAAGCCAATACCAATTACAGAAGCCATGAGAAACGACATCATCGCAAA
GATTTGTGGAGAAGATGGACAGGTGGATCCCAACTGTTTCGTTCTGGCACAGGCTGTAGTCTTTAGTGCA
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CCAGTGGGACTGTTTACCTGGCTGATATCCTCTTCTGTGAGTCAGCCCTCTTTTATTTTTCTGAGTACAT
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GGAAGATGTCCTTTGGGAGAGTTAGTGATTTGGGGCAGTTCATCCGAGAGTCTGAGCCTGAACCTGATGT
GAAGAAATCAAAAGGATTCATGTTCTCACAAGCTATGAAGAAGTGGGTGCAAGGAAATACTGACGAGGCC
CAAGAAGAGCTAGCTTGGAAGATTGCAAAAATGATAGTGAGTGATGTTATGCAGCAGGCACACCATGATC
AACCACTAGAGAAGTCTACAAAGCTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222020 representing NM_019921
Red=Cloning site Green=Tags(s)

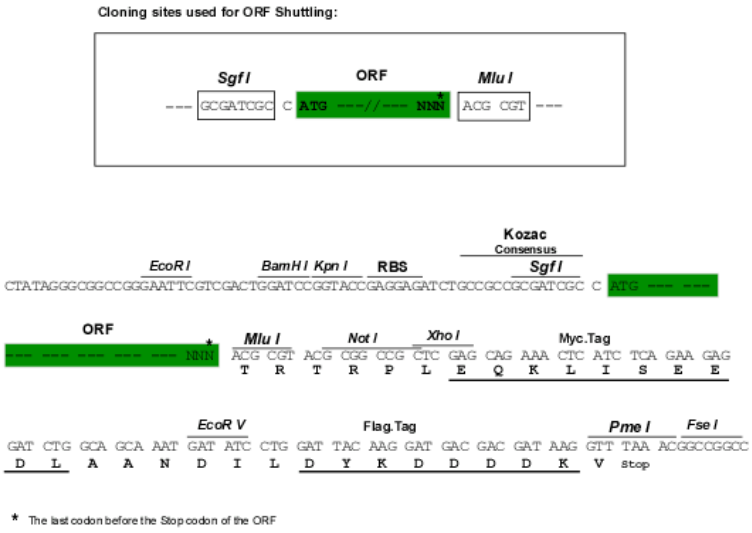
MRGAGPSPRHSPRALRPDPGPAMSFFRRKVKGKEQEKTLDVKSTKASVAVHSPQKSTKNHALLEAAGPSH
VAINAISANMDSFSSSRTATLKKQPSHMEAAHFGDLGRSCLDYQTQETKSSLSKTLEQVLRDTVVLPYFL
QFMELRRMEHLVKFWLEAESFHSTTWSRIRAHSLNTVKQSSLAEPVSPSKRHETPASSVTEALDRRLGDS
SSAPLLVTQSEGTDLSSRTQNPQNHLLLSQEGHSARSLHREVARTGSHQIPTDSQDSSSRLAVGSRNSCS
SPLRELSEKLMKSIEQDAVNTFTKYISPDAAKPIPITEAMRNDIIAKICGEDGQVDPNCFVLAQAVVFSA
MEQEHFSEFLRSHHFCKYQIEVLTSGTVYLADILFCESALFYFSEYMEKEDAVNILQFWLAADNFQSQLA
AKKGQYDGQEAQNDAMILYDKYFSLQATHPLGFDDVVRLEIESNICREGGPLPNCFTTPLRQAWTTMEKV
FLPGFLSSNLYYKYLNDLIHSVRGDEFLGGNVSLAAHGSVCLPEESHSGGSDGSTAQSSVKKASIKILKN
FDEAIIVDAASLDPESLYQRTYAGKMSFGRVSDLGQFIRESEPEPDVKKSKGFMFSQAMKKWVQGNTDEA
QEELAWKIAKMIVSDVMQQAHHDQPLEKSTKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9076_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_019921

ORF Size: 1986 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_019921.3, NP_064305.2

RefSeq Size: 3879 bp

RefSeq ORF: 1989 bp

Locus ID: 56697

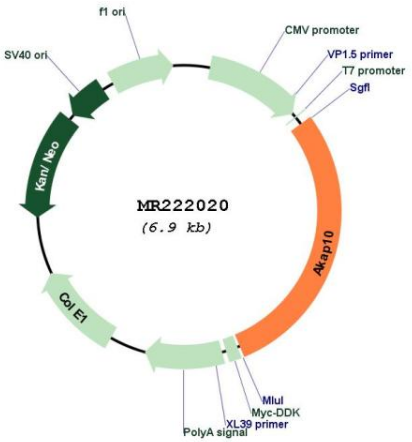
UniProt ID: O88845

Cytogenetics: 11 B2

MW: 73.6 kDa

Gene Summary: 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 localized to mitochondria and interacts with both the type I and type II regulatory subunits of PKA. It has been reported that this protein is important for maintaining heart rate and myocardial contractility through its targeting of protein kinase A. In mouse, defects of this gene lead to cardiac arrhythmias and premature death. In humans, polymorphisms in this gene may be associated with increased risk of arrhythmias and sudden cardiac death. [provided by RefSeq, May 2013]

Product images:



Circular map for MR222020