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Product datasheet for MR222726

Akap5 (NM_001101471) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Akap5 (NM_001101471) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Akap5
Synonyms:	3526401B18Rik; AKAP-5; AKAP 150; AKAP150; BB098886; Gm258; P150
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR222726 representing NM_001101471, codon optimized.
Due to the complexity of NM_001101471, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAACTAGCGTCAGTGAAATCCAGGTGGAGACGAAAGACGAGAAGGGCCCCGTTGCCGCCTCCCCAC
AGAAGGAGAGGCAGGAGCGGAAGACCGCAACGCTTTGTTTTAAGCGCAGGAAGAAAGCCAACAAAACTAA
ACCTAAAGCCGGTTCCAGAACCGCGGAGGAGACAAAGAAGCATACCCCTGAGGCTGGCGGCAGCGGCCAG
AGGCAGCCTGCCGGGGCCTGGGCTTCAATAAAGGGCCTCGTGACCCACCGGAAGAGGAGCGAGCCAGCCA
AGAAACAGAAGCCTCCAGAGGCTGAGGTCCAGCCAGAGGACGGGGCTTTGCCTAAAAAAAAGGCCAAGTC
TAGGCTGAAGTTCCCGTGCCTGAGGTTTTCCCGCGGCGCTAAGAGATCTAGGCACTCAAAGTTGACCGAA
GATTCCGGATACGTGCGCGTGCAGGGGGAGGCCGATGATTTGGAGATTAAAGCTCAGACTCAGCCCGACG
ACCAAGCCATCCAGGCTGGTTCAACACAGGGACTCCAGGAAGGCGTTCTGGTGCGCGATGGAAAAAAGAG
CCAGGAGAGTCATATCAGCAACTCCGTGACAAGCGGCGAGAACGTCATTGCTATTGAACTGGAACTTGAG
AATAAGTCATCAGCCATCCAGATGGGAACCCCCGAGCTGGAGAAAGAGACTAAGGTTATTACTGAAAAGC
CATCTGTGCAGACACAGCGGGCTAGCCTCCTCGAGAGCTCTGCGGCCGGAAGTCCCCGATCTGTGACTTC
TGCCGCTCCACCTAGCCCAGCAACTACCCACCAGCACTCACTGGAGGAGCCCTCCAATGGCATACGGGAA
TCTGCCCCATCAGGCAAAGATGACCGGAGGAAAACAGCTGCTGAGGAGAAGAAATCAGGCGAGACAGCCT
TGGGTCAAGCAGAGGAAGCCGCTGTGGGCCAGGCTGATAAAAGAGCACTGAGCCAGGCTGGAGAAGCGAC
AGCCGGCCACCCAGAGGAGGCCACCGTCATTCAGGCCGAATCACAGGCCAAGGAGGGAAAGTTGTCCCAG
GCCGAAGAGACAACAGTAGCACAAGCCAAGGAGACTGTCCTGTCCCAGGCCAAGGAGGGTGAGCTCTCAC
AGGCCAAGAAGGCGACAGTAGGTCAGGCCGAGGAGGCCACCATTGACCACACTGAGAAAGTCACTGTAGA
CCAGGCTGAAGAGACAACAGTCGGACAAGCAGAGGAGGCGACTGTGGGTCAGGCCGGCGAAGCCATTCTG
TCACAAGCCAAGGAAGCAACCGTAGTTGGCCAGGCCGAGGAAGCTACCGTGGACAGGGCAGAGGAAGCTA
CCGTGGGCCAGGCAGAGGAGGCGACCGTGGGGCATACAGAAAAGGTTACTGTGGATCAGGCCGAGGAAGC
CACTGTGGGCCAGGCCGAGGAGGCGACTGTAGGCCAGGCCGAGGAGGCCACAGTTGACTGGGCCGAGAAG
CCAACAGTCGGGCAAGCCGAGGAAGCCACTGTTGGACAAGCAGAAGAGGCCACTGTGGGCCATACTGAAA
AGGTTACAGTGGACCAGGCCGAGGAGGCGACCGTGGGACAGGCTGAGGAAGCTACTGTTGGGCATACCGA
GAAGGTCACAGTGGATCACGCAGAAGAGGCTACGGTTGGCCAGGCCGAGGAGGCAACGGTAGGGCAGGCG
GAGAAGGTCACAGTGGATCATGCCGAGGAAGCAACAGTGGGCCAGGCCGAGGAAGCAACGGTGGGCCAGG
CAGAAAAAGTCACTGTGGATCATGCTGAAGAGGCCACTGTGGGTCAGGCAGAGGAAGCCACCGTGGGTCA
AGCCGAAAAGGTAACAGTCGATCAGGCCGAGGAGCCCACCGTCGATCAAGCCGAGGAGGCTATCTCTAGC
CATGCCCCTGATCTGAAGGAGAACGGCATTGATACAGAGAAGCCGAGATCCGAGGAGTCTAAACGGATGG
AACCCATTGCAATAATCATAACCGATACAGAGATCTCCGAGTTCGACGTGAAGAAGAGTAAGAATGTACC
AAAGCAGTTCCTGATAAGCATGGAGAATGAGCAGGTCGGCGTGTTTGCCAATGACTCAGATTTTGAAGGA
AGGACGAGCGAACAGTACGAGACTCTGCTCATAGAAACTGCCAGTAGTCTCGTTAAGAATGCTATCGAGT
TGTCTGTGGAGCAACTTGTTAACGAAATGGTGTCAGAAGATAATCAGATCAATACTCTGTTCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

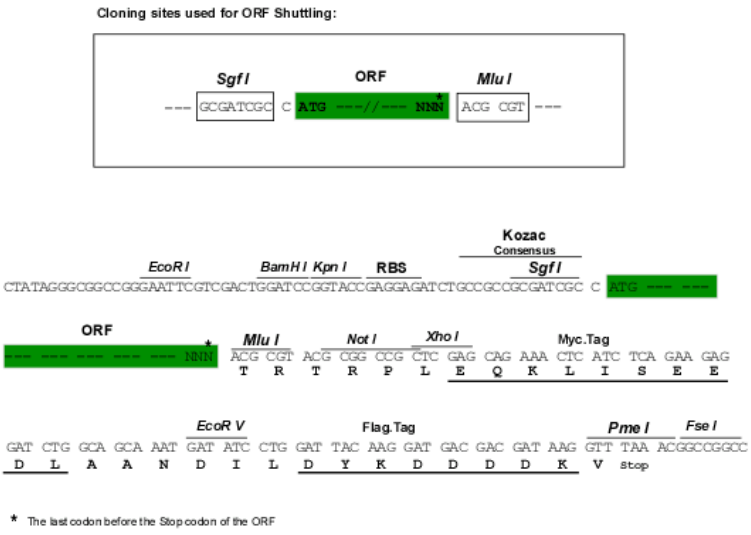
>MR222726 representing NM_001101471
Red=Cloning site Green=Tags(s)

METSVSEIQVETKDEKGPVAASPQKERQERKTATLCFKRRKKANKTKPKAGSRTAEETKKHTPEAGGSGQ
RQPAGAWASIKGLVTHRKRSEPAKKQKPPEAEVQPEDGALPKKKAKSRLKFPCLRFSRGAKRSRHSKLTE
DSGYVRVQGEADDLEIKAQTQPDDQAIQAGSTQGLQEGVLVRDGKKSQESHISNSVTSGENVIAIELELE
NKSSAIQMGTPELEKETKVITEKPSVQTQRASLLESSAAGSPRSVTSAAPPSPATTHQHSLEEPSNGIRE
SAPSGKDDRRKTAAEEKKSGETALGQAEEAAVGQADKRALSQAGEATAGHPEEATVIQAESQAKEGKLSQ
AEETTVAQAKETVLSQAKEGELSQAKKATVGQAEEATIDHTEKVTVDQAEETTVGQAEEATVGQAGEAIL
SQAKEATVVGQAEEATVDRAEEATVGQAEEATVGHTEKVTVDQAEEATVGQAEEATVGQAEEATVDWAEK
PTVGQAEEATVGQAEEATVGHTEKVTVDQAEEATVGQAEEATVGHTEKVTVDHAEEATVGQAEEATVGQA
EKVTVDHAEEATVGQAEEATVGQAEKVTVDHAEEATVGQAEEATVGQAEKVTVDQAEEPTVDQAEEAISS
HAPDLKENGIDTEKPRSEESKRMEPIAIIITDTEISEFDVKKSKNVPKQFLISMENEQVGVFANDSDFEG
RTSEQYETLLIETASSLVKNAIELSVEQLVNEMVSEDNQINTLFQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

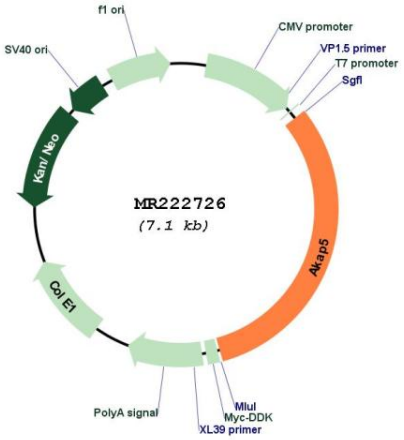
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001101471
ORF Size:	2235 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 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_001101471.1, NP_001094941.1
RefSeq Size:	6685 bp
RefSeq ORF:	2238 bp
Locus ID:	238276
UniProt ID:	D3YVF0
Cytogenetics:	12 C3
MW:	79.4 kDa
Gene Summary:	May anchor the PKA kinase to cytoskeletal and/or organelle-associated proteins, targeting the signal carried by cAMP to specific intracellular effectors.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222726