

Product datasheet for SC110078

AKAP12 (NM_005100) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: AKAP12 (NM_005100) Human Untagged Clone
Tag: Tag Free
Symbol: AKAP12
Synonyms: AKAP250; SSeCKS
Mammalian Cell Selection: None
Vector: [pCMV6-XL4](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_005100 edited
TTCGGCACGAGGGTTTCCCGCAGCGCTCTCCTTCATTTCGCAGGCTGGGCGGTTTCGCA
GTCCGGCTGGCGGGAAGGAAGGCGCTCTCGGGACCTCGCGGGCGCGCTTTTTGGCTCT
TGCCCCGTGCTCCCTGCGGCTTGGGGAAGGCGTAACCCGGCGGCTAGGCGCGGAGAAGTGC
GGAGGAGCCATGGGCGCCGGGAGCTCCACCGAGCAGCGCAGCCCGAGCAGCCGCCGAG
GGGAGCTCCACGCCGGCTGAGCCGAGCCAGCGGCGGGCCCTCGGCCGAGGCGGCG
CCAGACACCACCGCGACCCCGCATCGCTGCCTCGGACCCGCCACCAAGCTCTACAG
AAGAATGGTCAGCTGTCCACCATCAATGGCGTAGCTGAGCAAGATGAGCTCAGCTCCAG
GAGGGTGACCTAAATGGCCAGAAAGGAGCCCTGAACGGTCAAGGAGCCCTAAACAGCCAG
GAGGAAGAAGAAGTCATTGTACAGAGGTTGGACAGAGAGACTCTGAAGATGTGAGCAAA
AGAGACTCCGATAAAGAGATGGCTACTAAGTCAGCGGTTGTTACAGACATCACAGATGAT
GGGCAGGAGGAGACACCCGAAATAATCGAACAGATTCTTCTTCAGAAAGCAATTTAGAA
GAGCTAACACAACCCACTGAGTCCAGGCTAATGATATTGGATTTAAGAAGGTGTTAAG
TTTGTTGGCTTTAAATTCAGTGTGAAAAAGGATAAGACAGAGAAGCCTGACACTGTCCAG
CTACTCACTGTGAAGAAAGATGAAGGGGAGGAGCAGCAGGGGCTGGCGACCACAAGGAC
CCCAGCCTTGGGGCTGGAGAAGCAGCATCCAAAGAAAGCGAACCCAAACAATCTACAGAG
AAACCCGAAGAGACCCCTGAAGCGTGAGCAAAGCCACGCAGAAATTTCTCCCCAGCCGAA
TCTGGCCAAGCAGTGGAGGAATGCAAAGAGGAAGGAGAAGAGAAAACAAGAAAAAGAACCT
AGCAAGTCTGCAGAATCTCCGACTAGTCCCGTGACCAAGTGAACAGGATCAACCTTCAAA
AAATTCTCACTCAAGGTTGGGCGGCTGGCGCAAAAAGACCAAGTTTCAGGAAGCCGGAAG
GAGGATGAAGTGGAAGCTTCAGAGAAGAAAAAGGAACAAGAGCCAGAAAAAGTAGACACA
GAAGAAGACGAAAGGCAGAGGTTGCCTCCGAGAAACTGACCGCCTCCGAGCAAGCCAC
CCACAGGAGCCGGCAGAAAGTGCCACGAGCCCGGTTATCAGCTGAATATGAGAAAGTT
GAGCTGCCCTCAGAGGAGCAAGTCAGTGGCTCGCAGGGACCTTCTGAAGAGAACTGCT
CCGTTGGCGACAGAAAGTGTGATGAGAAAATAGAAGTCCACCAAGAAGAGGTTGTGGCC
GAAGTCCACGTCAGCACCGTGGAGGAGAAACCGAAGAGCAGAAAACGGAGGTGGAAGAA
ACAGCAGGCTCTGTGCCAGCTGAAGAATTGGTTGAAATGGATGCAGAACCTCAGGAAGCT



[View online »](#)

GAACCTGCCAAGGAGCTGGTGAAGCTCAAAGAAACGTGTGTTCCGGAGAGGACCCTACA
 CAGGGAGCTGACCTCAGTCTGATGAGAAGGTGCTGTCCAAACCCCGAAGGCGTTGTG
 AGTGAGGTGGAATGCTGTCATCACAGGAGAGAATGAAGGTGCAGGGAAGTCCACTAAAG
 AAGCTTTTACCAGCACTGGCTTAAAAAGCTTTCTGGAAAGAAACAGAAAGGAAAAAGA
 GGAGGAGGACGAGGAATCAGGGGAGCACACTCAGGTTCCAGCCGATTCTCCGGACAGC
 CAGGAGGAGCAAAAGGGCGAGAGCTCTGCCTCATCCCCTGAGGAGCCCGAGGAGATCACG
 TGTCTGGAAAAGGGCTTAGCCGAGGTGCAGCAGGATGGGGAAGCTGAAGAAGGAGTACT
 TCCGATGGAGAGAAAAAAGAGAAGGTGTCACTCCCTGGGCATCATTCAAAAAGATGGTG
 ACGCCCAAGAAGCGTGTAGACGGCCTTCGAAAAGTGATAAAGAAGATGAGCTGGACAAG
 GTCAAGAGCGCTACCTTGTCTTCCACCGAGAGCACAGCCTCTGAAATGCAAGAAGAAATG
 AAAGGGAGCGTGGAAAGAGCCAAAGCCGGAAGAACCAAAGCGCAAGGTGGATACCTCAGTA
 TCTTGGGAAGCTTAAATTTGTGTGGATCATCCAAGAAAAGCAAGGAGAGGGTCTCT
 TCTGATGAGGAAGGGGACCAAAGCAATGGGAGGAGACCACCAGAAAGCTGATGAGGCC
 GAAAAAGACAAAGAGACGGGACAGACGGGATCCTTGCTGGTTCCCAAGAACATGATCCA
 GGGCAGGGAAGTTCCTCCCGGAGCAAGCTGGAAGCCCTACCGAAGGGGAGGGCGTTTCC
 ACCTGGGAGTCATTTAAAAGTTAGTCACGCCAAGAAAAAATCAAAGTCCAAGCTGGAA
 GAGAAAAGCGAAGACTCCATAGCTGGGTCTGGTGTAGAACATTCCACTCCAGACTGAA
 CCCGGTAAAGAAGAACTCTGGTCTCAATCAAGAAGTTTATTCTGGACGAAGGAAGAAA
 AGGCCAGATGGGAAACAAGAACAAGCCCTGTTGAAGACGCAGGGCCAACAGGGGCCAAC
 GAAGATGACTCTGATGTCCCGGCCGTGGTCCCTCTGTCTGAGTATGATGCTGTAGAAAGG
 GAGAAAATGGAGGCACAGCAAGCCCAAAAAAGCGCAGAGCAGCCCGAGCAGAAGGCAGCC
 ACTGAGGTGTCCAAGGAGCTCAGCGAGAGTCAGGTTTATATGATGGCAGCAGCTGTGCT
 GACGGGACGAGGGCAGCTACCATTATTGAAGAAAGGTCTCCTTCTGGATATCTGCTTCA
 GTGACAGAACCTTTGAACAAGTAGAAGCTGAAGCCGCACTGTTAACTGAGGAGGTATTG
 GAAAGAGAAGTAATTGCAGAAGAAGAACCCCCACGGTACTGAACCTCTGCCAGAGAAC
 AGAGAGGCCCGGGGCGACACGGTCGTTAGTGAGGCGGAATTGACCCCGAAGCTGTGACA
 GCTGCAGAAAAGTGCAGGGCCATTGGGTGCCGAAGAAGGAACCGAAGCATCTGCTGCTGAA
 GAGACCACAGAAATGGTGTGAGCAGTCTCCAGTTAACCGACTCCCAGACACCACAGAG
 GAGGCCACTCCGGTGCAGGAGGTGGAAGGTGGCGTACCTGACATAGAAGAGCAAGAGAGG
 CGGACTCAAGAGGTCTCCAGGCAGTGGCAGAAAAAGTGAAGAGGAATCCAGCTGCCT
 GGCACCGTGGGCCAGAAGATGTGCTTACGCTGTGCAGAGAGCAGAGGCAGAAAGACCA
 GAAGAGCAGGCTGAAGCGTCGGGTCTGAAGAAAGAGACGGATGTAGTGTTGAAAGTAGAT
 GCTCAGGAGGCAAAAAGTGAACCTTTACACAAGGGAAGGTGGTGGGGCAGACCACCCCA
 GAAAGCTTTGAAAAAGCTCCTCAAGTCACAGAGAGCATAGAGTCCAGTGAGCTTGTAAAC
 ACTTGTCAAGCCGAAACCTTAGCTGGGGTAAAAACACAGGAGATGGTGTGGAACAGGCT
 ATCCCCCTGACTCGGTGGAACCCCTACAGACAGTGAGACTGATGGAAGCACCCCGTA
 GCCGACTTTGACGCACCAGGCACAACCCAGAAAGACGAGATTGTGGAATCCATGAGGAG
 AATGAGGTGCGATCTGGTACCCAGTCAGGGGACAGAAAGCAGAGGCAGTTCTGCACAG
 AAAGAGAGGCCTCCAGCACCTTCCAGTTTTGTGTTCCAGGAAGAACTAAAGAACAATCA
 AAGATGGAAGACACTCTAGAGCATACAGATAAAGAGGTGTCAGTGGAAACTGTATCCATT
 CTGTCAAAGACTGAGGGGACTCAAGAGGCTGACCAGTATGCTGATGAGAAAACCAAAGAC
 GTACCATTTTTCGAAGGACTTGAAGGGTCTATAGACACAGGCATAACAGTCAGTCGGGAA
 AAGGTCAGTGAAGTTGCCCTTAAAGGTGAAGGGACAGAAGAAGCTGAATGTAAAAAGGAT
 GATGCTCTTGAAGTGCAGAGTACGCTAAGTCTCTCCATCCCCCGTGGAGAGAGATG
 GTAGTTCAAGTCGAAAGGGAGAAAACAGAAGCAGAGCCAACCCATGTGAATGAAGAGAAG
 CTTGAGCAGGAAACAGCTGTTACCGTATCTGAAGAGGTGAGTAAAGCAGCTCTCCAGACA
 GTGAATGTGCCATCATAGATGGGGCAAAGGAAGTCAGCAGTTTGAAGGAAGCCCTCCT
 CCTGCCTAGGTCAAGAGGAGGCAGTATGCACCAAATTCAGTTTCAAGCTCTGAGGCA
 TCATTCCTTAACAGCGGCTGCAGAGGAGGAAAAGGTCTTAGGAGAACTGCCAACATT
 TTGAAACAGGTGAAACGTTGGAGCCTGCAGGTGCACATTTAGTTCTGGAAGAGAAATCC
 TCTGAAAAAATGAAGACTTTGCCGCTCATCCAGGGGAAGATGCTGTGCCACAGGGCCC
 GACTGTCAGGCAAAATCGACACCAGTATAGTATCTGCTACTACCAAGAAAGGCTTAAGT

TCGGACCTGGAAGGAGAGAAAACCATCACTGAAGTGGAAAGTCAGATGAAGTCGATGAG
 CAGGTTGCTTGCCAGGAGGTCAAAGTGAGTGTAGCAATTGAGGATTTAGAGCCTGAAAT
 GGGATTTTGGAACTTGAGACCAAAGCAGTAACTTGTCCAAAACATCATCCAGACAGCC
 GTTGACCAGTTTGTACGTACAGAAGAAACAGCCACCGAAATGTTGACGTCTGAGTTACAG
 ACACAAGCTCACGTGATAAAAGCTGACAGCCAGGACGCTGGACAGGAAACGGAGAAAGAA
 GGAGAGGAACCTCAGGCCTCTGCACAGGATGAAACACCAATTACTTCAGCCAAAGAGGAG
 TCAGAGTCAACCCGAGTGGGACAAGCACATTCTGATATTTCCAAAGACATGAGTGAAGCC
 TCAGAAAAGACCATGACTGTTGAGGTAGAAGTTCCACTGTAAATGATCAGCAGCTGGAA
 GAGGTCGTCCTCCCATCTGAGGAAGAGGGAGGTGGAGCTGGAACAAAGTCTGTGCCAGAA
 GATGATGGTCATGCCTTGTAGCAGAAAGAATAGAGAAGTCACTAGTTGAACCGAAAGAA
 GATGAAAAGGTGATGATGTTGATGACCCTGAAAACAGAACTCAGCCCTGGCTGATACT
 GATGCCTCAGGAGGCTTAACCAAAGAGTCCCCAGATACAATGGACCAAAAACAAAAGAG
 AAGGAGGATGCCAGGAAGTAGAATTGCAGGAAGGAAAAGTGCACAGTGAATCAGATAAA
 GCGATCACACCCCAAGCACAGGAGGAGTTACAGAAAACAAGAGAGAGAATCTGCAAAGTCA
 GAACTTACAGAATCTTAAACATCATGCAGTTAAACTCATTGTCTGTTTGAAGACCAGA
 ATGTGAAGACAAGTAGTAGAAGAAAATGAATGCTGCTGCTGAGACTGAAGACCAGTATTT
 CAGAACCTTGAGAATTGGAGAGCAGGCACATCAACTGATCTCATTCTAGAG

**5' Read Nucleotide
 Sequence:**

>OriGene 5' read for NM_005100 unedited
 TGAATTAGTATACGACTCCTATAGGGCGGCCGGAATTCGCACGAGGTTTGCCGCGAGCG
 CGTCTCCTTCATTCGCAGGCTGGGCGCGTTCGCAGTCGGCTGGCGGCGAAGGAAGGCGCT
 CTCGGGACCTCGCGGGCGCGCTTTTTGGCTCTTGCCCTGTCCCTGCGGCTTGGGGAA
 GCGTAACCCGCGGCTAGGCGCGGAGAGTGCAGGAGGAGCCATGGGCGCCGGGAGCTC
 CACCGAGCAGCGCAGCCCGGAGCAGCCGCCGAGGGGAGCTCCACGCCGCTGAGCCCGA
 GCCCAGCGGCGGCGGCCCTCGGCCGAGGCGGCCAGACACCACCGCGGACCCCGCCAT
 CGCTGCCTCGGACCCCGCACCAAGCTCCTACAGAAGAATGGTCAGTGTCCACCATCAA
 TGGCGTAGCTGAGCAAGATGAGCTCAGCCTCCAGGAGGTTGACCTAAATGGCCAGAAAGG
 AGCCCTGAACGGTCAAGGAGCCCTAAACAGCCAGGAGGAAGAAGAAGTCAATTGTACAGA
 GGTTGGACAGAGAGACTCTGAAGATGTGAGCAAAAGAGACTCCGATAAAGAGATGGCTAC
 TAAGTCAGCGGTTGTTACGACATCACAGATGATGGGCAGGAGGAGACACCCGAAATAAT
 CGAACAGATTCTTCTTCAGANAGCAATTTAGAAGAGCTAACACAACCCACTGAGTCCCA
 GGCTAATGATATTGGATTTAAGAAGGTGGTTAAGTTTGTGGCTTTAAAATCACTGTNGA
 AAAGGATNAGACAGAGAAGCCTGACACTGTCCAGCTACTCACTGTGAAGAAAGATGAAGG
 GGAGGGAGCAGCAGNGCTGGCGACCACAAGGACCCAGCCTTGNNGCTGNAGAAGCAGCA
 TCCACAGAAGCGAACCCAACATCTACGAGAAACCCGAGAGACCTG

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_005100 unedited TGTAACGCGGCACGCAATCTAGTGTGCGAGTTTTTTTTTTTTTTTTTTTTTAAAGTGAAGCAAA TATTTTATTTAAATCAGTCGTCAAATCACAACCTATCCAATGAATGTGTTGCAACATTG TTCTTAAAAGAATGGCACAAATATGGCACAAACACAATCCAGTATCTATCAAAATACCAT TTGTAAGAACCTGACTTATTTTCATGCCATGTGTGAATGCAGTCCAGCATATAAGAGTAG AATCAAAAACCTACAACAATTTCTTTCTCATAACATATAAAACATATTTCACTACTTTGC CTCAGGATTAAGCACACTTATCGGTCCAACAACCATAACAAGTAGGAAAAAGGATGTAA AGTTAATTTGCTACCAGAATATAACTTCTTTCTAACCTCCACTGGGTTAGAAAGAAAAAT TTCCCAATGACAATAGAACATTCTGTATGTTTCAAAATGCCTTTTTAGTTTTAGCACACT CCGTGTAATAGGAACGTGACCAATTTTCAGAGCACCCTAAATATGGACCTCAATCATTAG CGAATTTTTAAAGAATTGCACCTTGATCAGGAATGTTACATCTAGGAGGCTCTGTTTTTC CGGGCTATATAACTGAAGCTTAAAGCCTCCAAGCCTGCACTATGGCACATGCCCATCA TATACTGGGGATACAAAACCTGGAGTATCCTGCCATTCCCTTATACTTTAGAATAAA TTTCCACTTGATACCGGAGGACTACTTAACCACTTCATATAAATTTGGAAAGAATGGATA CTCAATTTCCACAACCAAACTAGGTTTTGCCAACTTCAGTTCCAGGTTAAGAATTTAAG GATCTCTAATCACAATCTATTAGCGTTCAAGCGAAATCGGCCGTTGGTCTTGGCAACAG AAAAGGCAAAGGCCCTAACCTCCGATAAACCTAGGAATGCCAGAGGCCCTCTAAAAGTA ATACATGAGGGCCCGCTCCACATTCCAAANTTTGAAAAC
Restriction Sites:	NotI-NotI
ACCN:	NM_005100
Insert Size:	6000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_005100.2, NP_005091.2</u>
RefSeq Size:	6609 bp
RefSeq ORF:	5349 bp
Locus ID:	9590
UniProt ID:	<u>Q02952</u>
Cytogenetics:	6q25.1
Domains:	PkinA_anch

Protein Families: Druggable Genome

Gene Summary: The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins, which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. The encoded protein is expressed in endothelial cells, cultured fibroblasts, and osteosarcoma cells. It associates with protein kinases A and C and phosphatase, and serves as a scaffold protein in signal transduction. This protein and RII PKA colocalize at the cell periphery. This protein is a cell growth-related protein. Antibodies to this protein can be produced by patients with myasthenia gravis. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The extent of this transcript is supported by transcript alignments.