

Product datasheet for **SC115256**

AK3L1 (AK4) (NM_013410) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AK3L1 (AK4) (NM_013410) Human Untagged Clone
Tag:	Tag Free
Symbol:	AK3L1
Synonyms:	AK3; AK3L1; AK3L2; AK 4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC115256 sequence for NM_013410 edited (data generated by NextGen Sequencing)

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ATGGCTTCCAAACTCCTGCGCGCGGTCATCCTCGGGCCGCCCGGCTCGGGCAAGGGCACC
GTGTGCCAGAGGATCGCCAGAACTTTGGTCTCCAGCATCTCTCCAGCGGCCACTTCTTG
CGGGAGAACATCAAGGCCAGCACCGAAGTTGGTGAATGGCAAAGCAGTATATAGAGAAA
AGTCTTTTGGTTCCAGACCATGTGATCACACGCCTAATGATGTCCGAGTTGGAGAACAGG
CGTGGCCAGCACTGGCTCCTTGATGGTTTTCTAGGACATTAGGACAAGCCGAAGCCCTG
GACAAAATCTGTGAAGTGGATCTAGTGATCAGTTTGAATATTCCATTTGAAACACTTAA
GATCGTCTCAGCCGCCGTTGGATTACCCTCCTAGCGGAAGGGTATATAACCTGGACTTC
AATCCACCTCATGTACATGGTATTGATGACGTCCTGGTGAACCGTTAGTCCAGCAGGAG
GATGATAAACCCGAAGCAGTTGCTGCCAGGCTAAGACAGTACAAAGACGTGGCAAAGCCA
GTCATTGAATTATACAAGAGCCGAGGAGTCTCCACCAATTTTCCGGAACGGAGACGAAC
AAAATCTGGCCCTACGTTTACACACTTTTCTCAAACAAGATCACACCTATTTCAGTCCAAA
GAAGCATATTGA
```

Clone variation with respect to NM_013410.3



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_013410 unedited
 NTTGTCGGATTTTGTATACGACTCCTATAGGGCGGCGCGAATTCGCACCAGGGTGCGTG
 GGGCGGCGGGGGCTGGCTTTGAGTCACCCCGCTTGTGCCAGCTTCCCGGCTCGGCGGA
 GACTGGCTTGGGATGCCTGGCCGCCGGCCCCCTTCTCGGACGCGGCGTGGGGAGCGAG
 CTGGAGTTAAGGATGAAGGGCGGCCGGCGAGTCCCAGTGAGAGCGGAGGGTGCCAGAGG
 TAGGGGGCCGAGAAACAAAGTTCCCGGGCTTCTCCGGGGCCGCGTCCGGGCTCGCGG
 TTTGACCGCCCCCTCCTCGCGAAGGCAATGGCTTCCAACTCCTGCGCGCGGTCACTCT
 CGGGCCGCCCGGCTCGGGCAAGGGCACCGTGTGCCAGAGGATCGCCAGAACTTTGGTCT
 CCAGCATCTCTCCAGCGGCCACTTCTTTCGGGAGAACATCAAGGCCAGCACCGAAGTTGG
 TGAGATGGCAAAGCAGTATATAGAGAAAAGTCTTTTGGTTCCAGACCATGTGATCACACG
 CCTAATGATGTCCGAGTTGGAGAACAGGCGTGGCCAGCACTGGCTCCTTGATGGTTTTCC
 TAGGACATTAGGACAAGCCGAGCCCTGGACAAAATCTGTGAAGTGATCTAGTGATCAG
 TTTGAATATTCCATTTGAAACCTTAAAGATCGTCTAGCCGCCGTTGGATTACCCTCCTA
 GCGGAAGGGTATATAACCTGGACTTCATCCACCTCATGTACATGGTATGGATGACGTAC
 TGGTGAACCGTTAGTCCGAGGAGGATGATAACCCAAACAGTTGCTGCCGGCTAAGAAG
 TCCAAAGACGTGGCAAGCCAGTCATTGATTATACAGAGCCCCGAGAGTGCTCCACCATTT
 TCCGAAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_013410 unedited
 NNTTTTTACTCTGGACCCGCGGCCCATNCTAGNGTCGAGTTTTTTTTTTTTTTTTTTTT
 TTTTCCCAATAAAAAAAGGACAGGGTCAATCCATAAAGTCAGACCAGCAGTTTAAATA
 AATCCTCTTCATAGCTCAGTTCTCAGGGCATAACAGAGATTCAATATAGCCCCATCGCTCT
 CAGTTATTAATACTGAGAGGGATAAAAAGCAATAACTATTGTTTAAAAGCCTAAGAGTGA
 AACAGATGTCCAAAAAAGAAAAAAGGCCAAATTCTTTCATCCAGGATGT
 CTGAAAAGGAGAGACTCTATGGAGCGTGGATGTAAAAAGGAGTTATTCCTACCGAAAA
 AAATGAACTGGGGACACAGTCACTCAAGACCAGAGAAACAACCACTATGAGTAAGTAGCT
 TCAATTTCACTGTTACCAGGAGGGCACACACCAGAAAGCCTGGGACAAAGCCTGGGCTAA
 AGCCCTCAGGATTCATTCTCAGGCTTCTGGTGTGTGGTTCAACAGCCTTTGTGGGGAT
 GGGGAGAACAGAGACTATCACCATCACATGTCAAAAAATTACCACAGCAACAGCTGTC
 AAAAACAGCTGGAGCTGAAGTTACACACCATTTGAAATCCACACTGTACTTGCTTTCTT
 GTGATGGGCTTGAGACATGTGCAAGACACCTTAAACATGTGTAGGTGACCAGCCTTTTG
 AAAGGCAGAGGAGGGCCTTTCATGAACTCTTCTACTCATTGTTTCTTATCAGTTCA
 CCATTTCAACTAGAAAAGATGCTGNCGGCTACCTCAGCTAGCTTCTAATTTGGACACAGC
 ACCAATACTACACACTATTGAATGAATGACCACATCTTCTGGGTNCTTCCATTGGNG
 CAGGGTCAATATNGTNTTTGGACTGAATANGTNGTGATNCTTGNTGANAANAT

Restriction Sites:

NotI-NotI

ACCN:

NM_013410

Insert Size:

2050 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:

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_013410.2](#), [NP_037542.1](#)

RefSeq Size: 2199 bp

RefSeq ORF: 672 bp

Locus ID: 205

UniProt ID: [P27144](#)

Cytogenetics: 1p31.3

Domains: ADK, ADK_lid

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Purine metabolism

Gene Summary: This gene encodes a member of the adenylate kinase family of enzymes. The encoded protein is localized to the mitochondrial matrix. Adenylate kinases regulate the adenine and guanine nucleotide compositions within a cell by catalyzing the reversible transfer of phosphate group among these nucleotides. Five isozymes of adenylate kinase have been identified in vertebrates. Expression of these isozymes is tissue-specific and developmentally regulated. A pseudogene for this gene has been located on chromosome 17. Three transcript variants encoding the same protein have been identified for this gene. Sequence alignment suggests that the gene defined by NM_013410, NM_203464, and NM_001005353 is located on chromosome 1. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2, and 3 all encode the same isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.