

Product datasheet for SC300914

AK3L1 (AK4) (NM_001005353) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AK3L1 (AK4) (NM_001005353) Human Untagged Clone
Tag:	Tag Free
Symbol:	AK4
Synonyms:	AK3; AK3L1; AK3L2; AK 4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC300914 representing NM_001005353. Blue=Insert sequence Red=Cloning site Green=Tag(s)

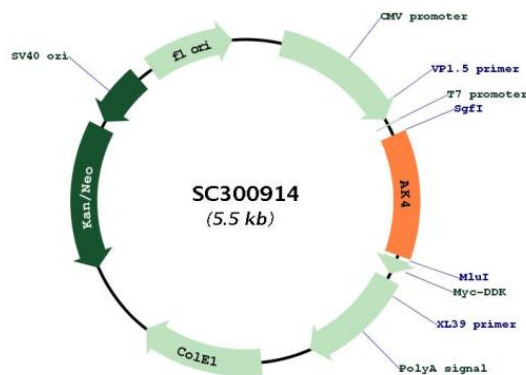
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GCTCGTTTAGTGAACCGTCAGAATTTGTAAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTTCCAACTCCTGCGCGGGTTCATCCTCGGGCCGCCGGCTCGGGCAAGGGCACCGTGTGCCAG
AGGATCGCCAGAACTTTGGTCTCCAGCATCTCTCCAGCGCCACTTCTTGGGGAACATCAAGGCC
AGCACCAGAGTTGGTGGATGGCAAAGCAGTATATAGAGAAAAGTCTTTGGTCCAGACCATGTGATC
ACACGCCAATGATGTCCGAGTTGGAGAACAGGCGTGGCCAGCACTGGCTCCTTGATGGTTTTCTAGG
ACATTAGGACAAGCCGAAGCCCTGGACAAAATCTGTGAAGTGGATCTAGTGATCAGTTGAATATCCA
TTTGAACACTTAAAGATCGTCTCAGCCCGGTTGGATCACCTCCTAGCGGAAGGGTATATAACCTG
GACTTCAATCCACCTCATGTACATGGTATTGATGACGTCAGTGGTGAACCGTTAGTCCAGCAGGAGGAT
GATAAACCAGGAGGAGTGTGTCAGGCTAAGACAGTACAAGACGTTGGCAAAGCCAGTCATTGAATTA
TACAAGAGCCGAGGAGTGTCCACCAATTTCCGGAACGGAGACGAACAAAATCTGGCCCTACGTTTAC
ACACTTTCTCAAACAAGATCACACCTATTCAGTCCAAAGAAGCATATTGA
ACGCGTACGCGGCCGCTCGAGCAGAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_001005353

Insert Size: 672 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001005353.2](#)

RefSeq Size:	6998 bp
RefSeq ORF:	672 bp
Locus ID:	205
UniProt ID:	P27144
Cytogenetics:	1p31.3
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Purine metabolism
MW:	25.3 kDa

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 (1) represents the longest transcript and encodes the longer isoform (a). 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.