

AK1 cDNA

Catalog Number: ATGD0070

PRODUCT INFORMATION

Catalog number

ATGD0070

Product type

cDNA

Species

Human

NCBI Accession No.

NP_000467.1

Alternative Names

HTL-S-58j

mRNA Refseq

NM_000476.2

OMIM

103000

Chromosome location

9q34.1

PRODUCT SPECIFICATION

Formulation

Lyophilized

Storage

Store the plasmid at -20C.

cDNA Size

585bp

Preparation before usage

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

Vector description

This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

Cloning Vector

pATGen (puc19-derived cloning vector)

General Description

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AK1 is an enzyme involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of the terminal phosphate group between ATP and AMP. This protein is found in the cytosol of skeletal muscle, brain and erythrocytes. It is a small ubiquitous enzyme which is essential for maintenance and cell growth. Defects in AK1 are the cause of a form of hemolytic anemia.

DATA

Sequence nucleotides

```
ATGGAAGAGA AGCTGAAGAA AACCAAGATC ATCTTTGTGG TGGGTGGGCC TGGCTCAGGG AAGGGCACCC  
AGTGTGAGAA GATCGTGCAG AAGTATGGCT ACACCCACCT CTCCACCGGG GACCTCCTGC GGTCCGAGGT  
CAGCTCAGGC TCGGCCAGGG GCAAGAAGCT GTCGGAAATC ATGGAGAAGG GGCAGCTGGT TCCACTGGAG  
ACAGTGTTGG ACATGCTCCG GGATGCCATG GTGGCCAAAG TCAATACTTC CAAAGGCTTC CTGATTGATG  
GCTACCCGCG GGAGGTGCAG CAAGGAGAAG AGTTTGAGCG ACGGATTGGA CAGCCACAC TGCTGCTGTA  
TGTGGACGCA GGCCCTGAGA CCATGACCCA GCGGCTCTTG AAACGTGGAG AGACCAGCGG GCGTGTGGAC  
GACAATGAGG AGACCATCAA AAAGCGGCTG GAGACCTATT ACAAGGCCAC AGAACCCGTC ATCGCCTTCT  
ATGAGAAACG TGGCATTGTG CGCAAGGTCA ACGCTGAGGG CTCCGTGGAC AGTGTCTTCT CCCAGGTCTG  
CACCCACCTG GACGCCCTAA AGTAG
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Transaction Sequence

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MEEKLKKTKI IFVVGPGSG KGTQCEKIVQ KYGYTHLSTG DLLRSEVSSG SARGKKLSEI MEKGQLVPLE TVLDMLRDAM  
VAKVNTSKGF LIDGYPREVQ QGEEFERRIG QPTLLLYVDA GPETMTQRLK KRGETSGRVD DNEETIKKRL ETTYKATEPV  
IAFYEKRIV RKVNAEGSVD SVFSQVCTHL DALK
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