

Product datasheet for RC212888

ADK (NM_006721) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADK (NM_006721) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADK
Synonyms:	AK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212888 representing NM_006721 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCTGCTGAGGAGGAGCCGAAGCCAAAAAGCTGAAGGTGGAGGCGCCGAAGCGCTGAGAGAAA
ATATTCTCTTTGGAATGGGAAATCCTCTGCTTGACATCTCTGCTGTAGTGGACAAAGATTTCTTGATAA
GTATTCTCTGAAACCAATGACCAATCTTGGCTGAAGACAAACACAAGGAAGTGTGATGAAGTGTG
AAAAAATTCAAAGTCGAATATCATGCTGGTGGCTCTACCCAGAATCAATTAAGTGGCTCAGTGGATGA
TTCAACAGCCACACAAAGCAGCAACATTTTTGGATGCATTGGGATAGATAAATTTGGGGAGATCCTGAA
GAGAAAAGCTGCTGAAGCCCATGTGGATGCTCATTACTACGAGCAGAATGAGCAGCAACAGGAAGTGT
GCTGCATGCATCACTGGTGAACAAGTCCCTCATAGCTAATCTTCTGCTGCCAATTGTTATAAAAAGG
AAAAACATCTTGATCTGGAGAAAACTGGATGTTGGTAGAAAAAGCAAGAGTTTGTATATAGCAGGCTT
TTTTCTTACAGTTTCCCCAGAGTCAGTATTAAGGTGGCTCACCATGCTTCTGAAAAACAAGGATTTTC
ACTTTGAATCTATCTGCACCGTTTATTAGCCAGTTCTACAAGGAATCATTGATGAAAGTTATGCCTATG
TTGATATACTTTTTGGAATGAGACAGAAGCTGCCACTTTTGCTAGAGAGCAAGGCTTTGAGACTAAGA
CATTAAGAGATAGCCAAAAAGACACAAGCCCTGCCAAAGATGAAGTCAAAGAGGAGCAAGTTCGTGATC
TTCACCAAGGGAGAGATGACACTATAATGGCTACAGAAAGTGAAGTCACTGCTTTTGGCTCTTGGGAT
AAGACCAGAAAGAAATTATTGATACCAATGGAGCTGGAGATGCATTTGTTGGAGGTTTTCTGTCTCAACT
GGTCTCTGACAAGCCTCTGACTGAATGTATCCGTGCTGGCCACTATGCAGCAAGCATCATAATTAGACGG
ACTGGCTGCACCTTCTGAGAAGCCAGACTTCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212888 representing NM_006721
 Red=Cloning site Green=Tags(s)

MAAAEEEEPKPKLKVAPQALRENILFGMGNPLLDISAVVDKDFLDKYSCLKPNDQILAEDKHKELFDELV
 KKFVVEYHAGGSTQNSIKVAQWMIQQPHKAATFFGCIGIDKFGEILKRKAAEAHVDAHYEQNEQPTGTC
 AACITGDNRSLIANLAAANCYKKEKHLDEKNWMLVEKARVCYIAGFFLTVSPESVLKVAHASENNRIF
 TLNL SAPFISQFYKESLMKVMPYVDILFGNETEAATFAREQGFETKDIKEIAKKTQALPKMNSKRQRIVI
 FTQGRDDTIMATESEVTAFVLDQDQKEIIDTNGAGDAFVGGFLSQLVSDKPLTECIRAGHYAASIIIRR
 TGCTFPEKPDFH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006721

ORF Size: 1086 bp

OTI Disclaimer: 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_006721.4](#)

RefSeq Size: 2049 bp

RefSeq ORF: 1089 bp

Locus ID: 132

UniProt ID: [P55263](#)

Cytogenetics: 10q22.2|10q11-q24

Domains: pfkB

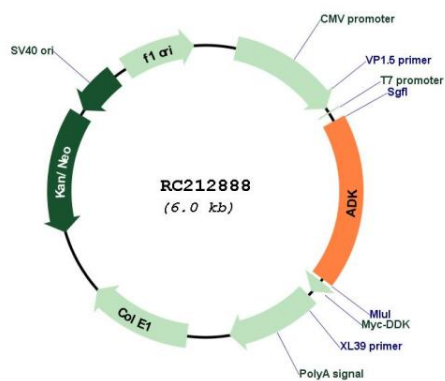
Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Purine metabolism

MW: 40.5 kDa

Gene Summary: This gene an enzyme which catalyzes the transfer of the gamma-phosphate from ATP to adenosine, thereby serving as a regulator of concentrations of both extracellular adenosine and intracellular adenine nucleotides. Adenosine has widespread effects on the cardiovascular, nervous, respiratory, and immune systems and inhibitors of the enzyme could play an important pharmacological role in increasing intravascular adenosine concentrations and acting as anti-inflammatory agents. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2011]

Product images:



Circular map for RC212888