

## Product datasheet for **RC200628**

### ADK (NM\_001123) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADK (NM_001123) 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:	>RC200628 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACGTCAGTCAGAGAAAAATTCTCTTTGGAATGGGAAATCCTCTGCTTGACATCTCTGCTGTAGTGG  
ACAAAGATTTCTTGATAAGTATTCTCTGAAACCAATGACCAAATCTGGCTGAAGACAAACACAAGGA  
ACTGTTTGATGAACCTGTGAAAAATTCAAAGTGAATATCATGCTGGTGGCTCTACCCAGAATTCATT  
AAAGTGGCTCAGTGGATGATTCAACAGCCACACAAAGCAGCAACATTTTTGGATGCATTGGGATAGATA  
AATTTGGGAGATCCTGAAGAGAAAAGCTGCTGAAGCCCATGTGGATGCTCATTACTACGAGCAGAAATGA  
GCAGCCAAACAGGAACTTGTGCTGCATGCATCACTGGTGACAACAGGTCCCTCATAGCTAATCTTGCTGCT  
GCCAATTGTTATAAAAAGGAAAAACATCTTGATCTGGAGAAAACTGGATGTTGGTAGAAAAAGCAAGAG  
TTTGTTATATAGCAGGCTTTTTCTTACAGTTTCCCCAGAGTCAGTATTAAGGTGGCTCACCATGCTTC  
TGAAAACAACAGGATTTTCACTTTGAATCTATCTGCACCGTTTTTTAGCCAGTTCTACAAGGAATCATTG  
ATGAAAGTTATGCCTTATGTTGATATACTTTTGGAAATGAGACAGAAGCTGCCACTTTTGTAGAGAGC  
AAGGCTTTGAGACTAAAGACATTAAGAGATAGCCAAAAAGACACAAGCCCTGCCAAGATGAATCAAA  
GAGGCAGCGAATCGTGATCTTACCCAAGGGAGAGATGACACTATAATGGCTACAGAAAGTGAAGTCACT  
GCTTTTGTGTCTGGATCAAGACCAGAAAGAAATTATTGATACCAATGGAGCTGGAGATGCATTTGTTG  
GAGGTTTTCTGTCTCAACTGGTCTCTGACAAGCCTCTGACTGAATGTATCCGTGCTGGCCACTATGCAGC  
AAGCATCATAATTAGACGGACTGGCTGCACCTTCTGAGAAGCCAGACTTCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200628 protein sequence  
Red=Cloning site Green=Tags(s)

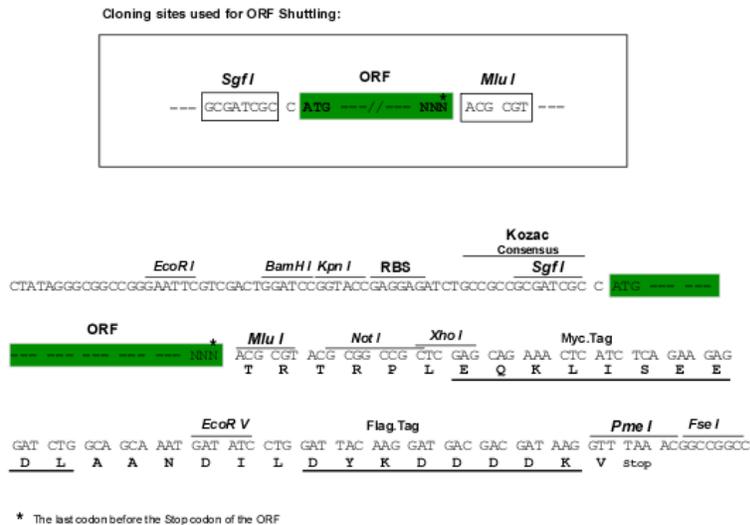
MTSVRENILFGMGNPLLDISAVVDKDFLDKYSCLKPNDQILAEDKHKELFDELVKKFKVEYHAGGSTQNSI  
 KVAQWMIQPHKAATFFGCIGIDKFGEILKRKAAEAHVDAHYEQNEQPTGTCAACITGDNRSLIANLAA  
 ANCYKKEKHLDLKKNWMLVEKARVCYIAGFFLTVSPESVLKVAHHASENNRIFTLNLSAPFFSQFYKESL  
 MKVMPYVDILFGNETEAATFAREQGFETDKIKEIAKKTQALPKMNSKRQRIVIFTQGRDDTIMATESEVT  
 AFAVLDDQDQKEIIDTNGAGDAFVGGFLSQLVSDKPLTECIRAGHYAASIIIRRTGCTFPEKPDFH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6198\\_e09.zip](https://cdn.origene.com/chromatograms/mk6198_e09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001123

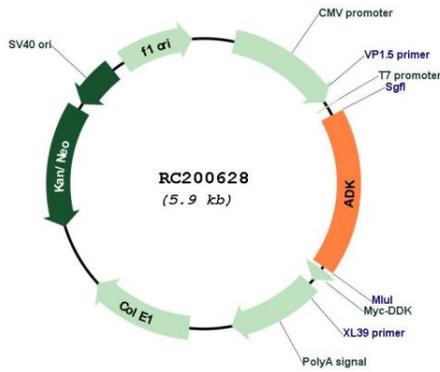
**ORF Size:** 1035 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

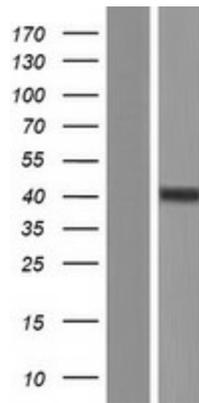
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001123.4</a>
<b>RefSeq Size:</b>	2288 bp
<b>RefSeq ORF:</b>	1038 bp
<b>Locus ID:</b>	132
<b>UniProt ID:</b>	<a href="#">P55263</a>
<b>Cytogenetics:</b>	10q22.2   10q11-q24
<b>Domains:</b>	pfkB
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Purine metabolism
<b>MW:</b>	38.7 kDa
<b>Gene Summary:</b>	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]

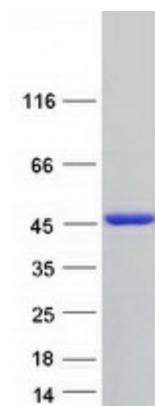
Product images:



Circular map for RC200628



Western blot validation of overexpression lysate (Cat# [LY420110]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200628 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADK protein (Cat# [TP300628]). The protein was produced from HEK293T cells transfected with ADK cDNA clone (Cat# RC200628) using MegaTran 2.0 (Cat# [TT210002]).