

Product datasheet for **RC200544**

NADK (NM_023018) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NADK (NM_023018) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NADK
Synonyms:	dJ283E3.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200544 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAATGGAACAAGAAAAATGACCATGAATAAGGAATTGAGTCCAGACGCGGCTGCTTACTGCTGCT
 CGGCTGCCACGGCGATGAGACCTGGAGTTACAACCACCCATCCGGGGCCGGGCAAGTCTCGAGCCT
 GTCTGCCTCGCCCGCCTGGGGAGCACCAAGGAGTTCAGGAGGACACGCTCTCTTCATGGCCATGCCCG
 GTGACCACTTTTGGACAAAGGCCTGTGTGCTGCAGAACCCAGACCATCATGCACATTAGGACCCCG
 CGAGCCAGCGGCTGACGTGGAACAAGTCCCAAAGAGCGTCTTGTATCAAGAAGATGAGAGATGCCAG
 CCTACTGCAGCCGTTCAAGGAGCTCTGCACGCACCTCATGGAGGAGAATGATCGTGTATGTGAAAAAG
 AAAGTGTAGAAGACCCTGCCATCGCCAGCGATGAAAGCTTTGGGCAGTGAAGAAGAAATTCTGTACCT
 TTCGAGAAGATTATGATGACATTTCCAATCAGATAGACTTCATCATCTGCCTGGGGGAGACGGGACGCT
 GCTGTACGCTTCTCGCTTTCCAGGGCAGCGTCCCTCCGGTCATGGCCTTCCACCTGGGCTCCCTGGGC
 TTCTGACCCATTACAGCTTTGAGAACTTTCAGTCCCAAGTACTCAGGTGATAGAGGGGAAACGCAGCTG
 TTGTTCTCCGGAGTCGGCTGAAGGTCAGGTTGGTGAAGGAGCTCCGGGGGAAAGACGGCCGTGCACAA
 TGGGCTGGGTGAGAAAGGCTCGCAGGCTGCAGGCTGGACATGGATGTCGGGAAGCAGGCCATGCAGTAC
 CAGGCTCTGAATGAGGTGGTATTGACAGAGGCCCTCCTCCTACCTGTCCAATGTGGATGTCTACCTGG
 ACGGACACCTCATCACCAGGTGCAGGGCGACGGAGTATCGTGTCCACCCGACGGGCAGCACGGCGTA
 TGCGGCCGCGCCGGGCTCCATGATCCACCCCAACGTGCCGGCCATCATGATCACGCCATCTGCCCC
 CACTCGCTGTCTTCCGGCCCATCGTGGTCCCCGAGGGTTCGAGCTGAAGATCATGCTGTACCTGAAG
 CAAGGAACACAGCATGGGTGTCTTTGATGGACGGAAGAGACAAGAGATCCGCCATGGAGACAGCATGAG
 CATCACTACCTCATGCTACCCGCTCCCTCCATCTGTGTGCGGGACCCGTGAGCGACTGGTTTGAGAGC
 CTCGCCAGTGCCTGCATTGGAACGTCGGAAGAAGCAAGCCACTTCGAGGAGGAGGAGGAGGAGGAGG
 AGGAGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200544 protein sequence
 Red=Cloning site Green=Tags(s)

MEMEQEKMTMNKELSPDAAAYCCSACHGDETWYNHPIRGRAKSRSLSASPALGSTKEFRTRSLHGPCP
 VTTFGPKACVLQNPQIMHIQDPASQRLTWNKSPKSVLVIKKMRDASLLQPFKELCTHLMENMIVYVEK
 KVLDPAIASDESFGAVKKKFFREDYDDISNQIDFIICLGGDGLLYASSLFQGSVPPVMAFHLGSLG
 FLTPFSFENFQSQVTQVIEGNAAVLRSRLKVRVVKELRGKKTAVHNLGEGKSQAAGLMDVKGQAMQY
 QVLNEVVIDRGPSSYLSNVDVYLDGHLITTVQDGVIVSTPTGSTAYAAAAGASMIHPNVPAIMITPICP
 HSLSFRPIVVPAGVELKIMLSPEARNTAWVSFDGRKRQEIIRHGDSISITTSYPLPSICVRDPVSDWFES
 LAQCLHWNVRKKQAHFEVEEEEEEEG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6278_d09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN:

NM_023018

ORF Size:

1338 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 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](#)

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:

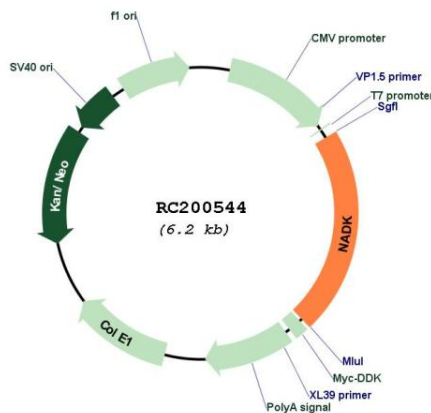
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

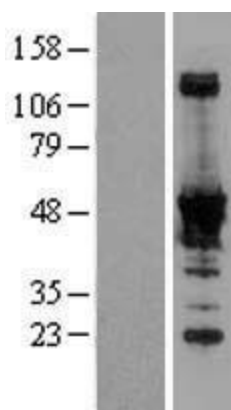
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_023018.5
RefSeq Size:	3244 bp
RefSeq ORF:	1341 bp
Locus ID:	65220
UniProt ID:	O95544
Cytogenetics:	1p36.33
Domains:	NAD_kinase
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Nicotinate and nicotinamide metabolism
MW:	49.2 kDa
Gene Summary:	NADK catalyzes the transfer of a phosphate group from ATP to NAD to generate NADP, which in its reduced form acts as an electron donor for biosynthetic reactions (Lerner et al., 2001 [PubMed 11594753]).[supplied by OMIM, Mar 2008]

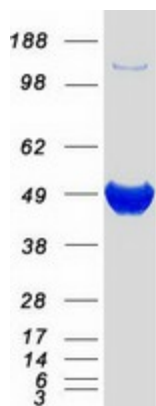
Product images:



Circular map for RC200544



Western blot validation of overexpression lysate (Cat# [LY411491]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200544 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NADK protein (Cat# [TP300544]). The protein was produced from HEK293T cells transfected with NADK cDNA clone (Cat# RC200544) using MegaTran 2.0 (Cat# [TT210002]).