

## Product datasheet for RC216274

### DAP Kinase 2 (DAPK2) (NM\_014326) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DAP Kinase 2 (DAPK2) (NM_014326) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DAP Kinase 2
Synonyms:	DRP-1; DRP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216274 representing NM_014326 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTCCAGGCCCTCAATGAGGAGTCCAACATGGAGCCATTCAAGCAGCAGAAGGTGGAGGACTTTTATG  
ACATCGGAGAGGAGCTGGGGAGTGGCCAGTTTCCATCGTGAAGAAGTCCCGGAGAAAGACACGGGGCT  
TGAGTATGCAGCCAAGTTCATCAAGAAGCGGCAGAGCCGGCGAGCCGGCGGGTGTGAGCCGGGAGGAG  
ATCGAGCCGGGAGGTGAGCATCCTGCGGCAGGTGCTGCACCACAATGTCATCACGTCGCACGAGCTATG  
AGAACCGCACCGAGCTGGTGTCTATCCTTGAGCTAGTGTCTGGAGGAGAGCTCTTCGATTCCTGGCCCA  
GAAGGAGTCACTGAGTGAGGAGGAGGCCACCAGCTTCATTAAGCAGATCCTGGATGGGTGAACTACCTT  
CACACAAAGAAAATTGCTCACTTTGATCTCAAGCCAGAAAACATTATGTTGTTAGACAAGAATATCCCA  
TTCCACACATCAAGCTGATTGACTTTGGTCTGGCTCACGAAATAGAAGATGGAGTTGAATTTAAGAATAT  
TTTTGGGACGCCGGAATTTGTTGCTCCAGAAATTTGTAACACGAGCCCTGGGTCTGGAGGCTGACATG  
TGGAGCATAGGCGTCATCACCTACATCCTCTTAAGTGGAGCATCCCTTTCTGGGAGACACGAAGCAGG  
AAACACTGGCAAATATCACAGCAGTGAATACGACTTTGATGAGGAATCTTCAGCCAGACGAGCGAGCT  
GGCCAAGGACTTTATTCGGAAGCTTCTGGTTAAGAGACCCGAAACGGCTCACAAATCCAAGAGGCTCTC  
AGACACCCCTGGATCACGCCGGTGGACAACCAGCAAGCCATGGTCCGAGGGAGTCTGTGGTCAATCTGG  
AGAACCTCAGGAAGCAGTATGTCCGAGGCGGTGGAAGCTTTCCTTCAGCATCGTGTCCCTGTGCAACCA  
CCTCACCCGCTCGCTGATGAAGAAGGTGCACCTGAGGCCGGATGAGGACCTGAGGAACTGTGAGAGTGAC  
ACTGAGGAGGACATCGCCAGGAGAAAGCCCTCCACCCACGGAGGAGGAGCAGCACCTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC216274 representing NM\_014326  
Red=Cloning site Green=Tags(s)

MFQASMRSPNMEPFKQKVEDFYDIGEELGSGQFAIVKKCREKSTGLEAAKFIKKRQSRASRRGVSREE  
 IEREVSI LRQVLHNNVITLHDVYENRTDVVLELELVSGGELDFLAQKESLSEEEATSF IKQILDGVNYL  
 HTKKIAHFDLKPENIMLLDKNIPHIKILDFGLAHEIEDGVFEKNIFGTPEFVAPEIVNYEPLGLEADM  
 WSIGVITYILLSGASPFLGDTKQETLANITAVSYDFDEEFFSQTSELAKDFIRKLLVKETRKRLTIQEAL  
 RHPWITPVDNQQAMVRRRESVVNLENFRKQYVRRRWKLSFSIVSLCNHLTRSLMKKVHLRPDEDLRNCESD  
 TEEDIARRKALHPRRSSTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6167\\_f12.zip](https://cdn.origene.com/chromatograms/mk6167_f12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_014326

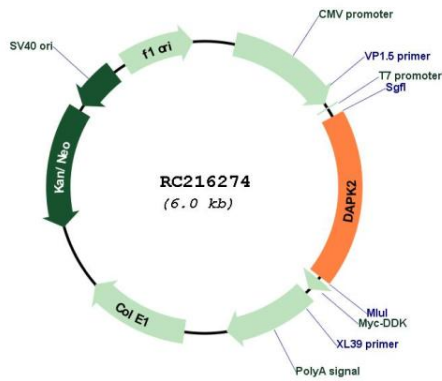
**ORF Size:** 1110 bp

**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.

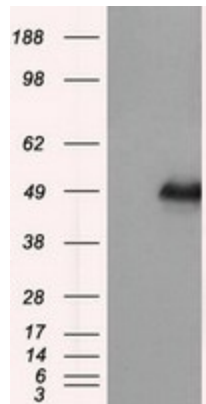
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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>RefSeq:</b>	<a href="#">NM_014326.5</a>
<b>RefSeq Size:</b>	2628 bp
<b>RefSeq ORF:</b>	1113 bp
<b>Locus ID:</b>	23604
<b>UniProt ID:</b>	<a href="#">Q9UIK4</a>
<b>Cytogenetics:</b>	15q22.31
<b>Domains:</b>	pkinase
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Bladder cancer, Pathways in cancer
<b>MW:</b>	42.7 kDa
<b>Gene Summary:</b>	This gene encodes a protein that belongs to the serine/threonine protein kinase family. This protein contains a N-terminal protein kinase domain followed by a conserved calmodulin-binding domain with significant similarity to that of death-associated protein kinase 1 (DAPK1), a positive regulator of programmed cell death. Overexpression of this gene was shown to induce cell apoptosis. It uses multiple polyadenylation sites. [provided by RefSeq, Jul 2008]

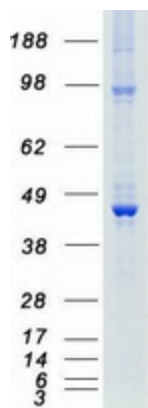
Product images:



Circular map for RC216274



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DAPK2 (Cat# RC216274, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DAPK2 (Cat# [TA501099]).



Coomassie blue staining of purified DAPK2 protein (Cat# [TP316274]). The protein was produced from HEK293T cells transfected with DAPK2 cDNA clone (Cat# RC216274) using MegaTran 2.0 (Cat# [TT210002]).