

## Product datasheet for RC215423

### DAP Kinase 1 (DAPK1) (NM\_004938) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DAP Kinase 1 (DAPK1) (NM_004938) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DAP Kinase 1
Synonyms:	DAPK; ROCO3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215423 representing NM_004938 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACCGTGTTCAGGCAGGAAAACGTGGATGATTACTACGACACCGGCGAGGAACTTGGCAGTGGACAGT  
TTGCGTTGTGAAGAAATGCCGTGAGAAAAGCACCAGCCCTCCAGTATGCCGCAAATTCATCAAGAAAAG  
GAGGACTAAGTCCAGCCGGGGTGTGAGCCGAGGACATCGAGCGGAGGTCAGCATCTGAAGGAG  
ATCCAGCACCCCAATGTCATCACCTGCACGAGGTCTATGAGAACAAGACGGACGTCATCTGATCTTGG  
AACTCGTTGCAGGTGGCAGCTGTTGACTTCTTAGCTGAAAAGGAATCTTTAACTGAAGAGGAAGCAAC  
TGAATTTCTCAAACAAATCTTAATGGTGTACTACCTGCACTCCCTTCAAATCGCCACTTTGATCTT  
AAGCCTGAGAACATAATGCTTTGGATAGAAATGTCCCAAACCTCGGATCAAGATCATTGACTTTGGGT  
TGGCCATAAAATGACTTTGAAATGAATTTAAAACATATTTGGGACTCCAGAGTTTGTGCGTCTCTGA  
GATAGTCAACTATGAACCTCTTGGTCTTGAGGCAGATATGTGGAGTATCGGGTAATAACCTATATCCTC  
CTAAGTGGGGCTCCCATTTCTTGAGACACTAAGCAAGAAACGTTAGCAAATGTATCCGCTGTCAACT  
ACGAATTTGAGGATGAATACTTCAGTAATACCAGTGCCCTAGCCAAAGATTTTCAAGAAGACTTCTGGT  
CAAGGATCCAAAGAAGAGAATGACAATCAAGATAGTTTGCAGCATCCCTGGATCAAGCCTAAAGATACA  
CAACAGGCACCTTAGTAGAAAAGCATCAGCAGTAAACATGGAGAAATTCAGAAGTTTGCAGCCCGGAAAA  
AATGGAACAATCCGTTTCGCTTGATATCACTGTGCCAAAGATTATCCAGGTCATTCTGTCCAGAAGTAA  
CATGAGTGTGCCAGAAGCGATGATACTCTGGATGAGGAAGACTCCTTTGTGATGAAAGCCATCATCCAT  
GCCATCAACGATGACAATGTCCCAGGCCTGCAGCACCTTCTGGGCTCATTATCCAACATGATGTTAAAC  
AACCCAACAAGCACGGGACACCTCCATTACTCATTGCTGCTGGCTGTGGGAATTTCAAATACTACAGTT  
GCTCATTAAAAGAGGCTCGAATCGATGTCCAGGATAAGGGCGGGTCCAATGCCGTCTACTGGGCTGCT  
CGGCATGGCCACGTCGATACCTTGAATTTCTCAGTGAGAACAATGCCCTTTGGATGTGAAAGACAAGT  
CTGGAGAGATGGCCCTCCAGTGGCAGCTCGCTATGGCCATGCTGACGTGGCTCAGTTACTGTGCAGCTT  
CGGCTCAAATCCCAATATCCAGGACAAGGAAGAAGAAACCCCTGCAGTGTGCTGCTTGGCAGGCTAT



[View online >](#)

TACTCTGTGGCCAAAGCCCTTTGTGAAGCCGGCTGTAACGTGAACATCAAGAACCAGAGAAGGAGAGACGC  
CCCTCCTGACAGCCTCTGCCAGGGGCTACCACGACATCGTGGAGTGTCTGGCCGAACATGGAGCCGATCT  
TAATGCTTGCACAAGGACGGACACATTGCCCTTCATCTGGCTGTAAAGACGGTGTGAGATGGAGGTAATC  
AAGACTCTCTCAGCCAAGGGTGTTCGTGATTATCAAGACAGGCACGGCAATACTCCCCTCCATGTGG  
CATGTAAGATGGCAACATGCCTATCGTGGTGGCCCTCTGTGAAGCAAATGCAATTTGGACATCTCAA  
CAAGTATGGGCGAACGCCTCTGCACCTTGGCCCAACAACGGAATCTAGACGTGGTCCGGTATCTCTGT  
CTGATGGGAGCCAGCGTTGAGGCGCTGACCAGCGGAAAGACGGCAGAAGATCTTGTAGATCGGAAC  
AGCAGGACAGTAGCAGGTCTCCTTGAAGACTTCGAAAGGATACGCACCGAGGACTTTCATCCAGCA  
GCTCCGACCCACACAGAACCCTGCAGCCAAGAATTAAGCTCAAGCTGTTTGGCCACTCGGGATCCGGGAAA  
ACCACCCTTGTAGAATCTCTCAAGTGTGGGCTGCTGAGGAGCTTTTTCAGAAGGCGTCCGCCAGACTGT  
CTTCCACCAACTCCAGCAGGTTCCACCTTACCCTGGCTTCTAAGCCACAGTCTCAGTGAGCATCAA  
CAACCTGTACCCAGGCTGCGAGAACGTGAGTGTGAGGAGCCGAGCATGATGTTGAGCCGGGTCTTACC  
AAAGGGATGCTGGAGGTGTTGTGGCCCCGACCCACCACCGACTGCTCGGCCGATGACCAGTCCACCA  
AGGCCATCGACATCCAGAACGCTATTTGAATGGAGTTGGCGATTCAGCGTGTGGGAGTCTCTGGAAA  
TCCTGTGATTTCTGCTGTTATGACTATTTGCTGCAAAATGATCCACGTCATCCATGTTGTTGCTTT  
AGTCTAGAAGAGCCCTATGAGATCCAGCTGAACCAAGTGATTTTCTGGCTCAGTTTCTGAAGTCCCTTG  
TCCCAGTTGAAGAACCATAGCCTTCGGTGGCAAGCTGAAGAACCCTCCAAGTTGCTCGGTGGCCAC  
CCACGCTGACATCATGAATGTTCTCGACCCGGCTGGAGGCGAGTTTGGATATGACAAAGACATCGTTG  
CTGAAAGAGATTAGGAACAGGTTTGGAAATGATCTTCACATTTCAAATAAGCTGTTTGTCTGGATGCTG  
GGGCTTGGGTCAAAGGACATGAAGGACTTCGAAATCATCTGCAAGAAATACGAAGCCAGATTGTTTC  
GGTCTGCTCCTCCATGACTCACCTGTGTGAGAAAATCATCTCCACGCTGCCTTCTGGAGGAAGCTCAAT  
GGACCAACCAGCTGATGTCGTCGAGCAGTTTGTGTACGACGTGACAGGACCAGTGAACCCCTGGCCA  
GCGAGGAGGACCTCAGGCGCATTGCTCAGCAGCTCCACAGCACAGGCGAGATCAACATGCAAAAGTGA  
AACAGTTCAGGACGTGCTGCTCCTGGACCCCGCTGGCTCTGCACAAACGTCCTGGGGAAGTTGCTGTCC  
GTGGAGACCCACGGGCGCTGCACCACTACCGGGCCGCTACACCGTGGAGGACATCCAGCGCCTGGTGC  
CCGACAGCGAGTGGAGGAGCTGCTGCAGATCCTCGATGCCATGGACATCTGCGCCCGGACCTGAGCAG  
CGGGACCATGGTGGACGTCCAGCCCTGATCAAGACAGACAACCTGCACCGCTCCTGGGCTGATGAGGAG  
GACGAGGTGATGGTGTATGGTGGCGTGCATCGTGCCCGTGGAAACCTCACCCCTTCCCATGTGGCA  
TCTTTCACAAGGTCCAGGTGAACCTGTGCCGTGGATCCACCAGCAAAGCACAGAGGGCGACGCGGACAT  
CCGCCTGTGGGTGAATGGCTGCAAGCTGGCCAACCGTGGGCGGAGCTGCTGGTGTCTGGTCAACCAC  
GGCCAGGGCATTGAGGTCCAGGTCCGTGGCCTGGAGACGGAGAAGATCAAGTGTGCTGCTGCTGGACT  
CGGTGTGACAGCACCATTGAGAAGCTCATGGCCACCACGCTGCCAGGGCTCCTGACCGTGAAGCATTACCT  
GAGCCCCAGCAGCTGCGGGAGCACCATGAGCCCGTCATGATCTACCAGCCACGGGACTTCTCCGGGCA  
CAGACTCTGAAGGAAACCTCACTGACCAACACCATGGGGGGTACAAGGAAAGCTTACAGCAGCATCATGT  
GCTTCCGGTGTACGACGTCTACTCACAGGCCAGCCTCGGCATGGACATCCATGCATCAGACCTGAACCT  
CCTCACTCGGAGGAAACTGAGTCGCTGCTGGACCCGCCGACCCCTGGGGAAGGACTGGTGCCTTCTC  
GCCATGAACCTTAGGCCTCCCTGACCTCGTGGCAAAGTACAACACCAATAACGGGGCTCCCAAGGATTTCC  
TCCCCAGCCCCCTCCAGCCCTGCTGCGGGAATGGACCACCTACCCTGAGAGCACAGTGGGACCCCTCAT  
GTCCAAACTGAGGGAGCTGGGTGCGCGGATGCCGAGACTTTTGTGTAAGGCATCCTCTGTGTTCAA  
ATCAACCTGGATGGCAATGGCCAGGAGGCTATGCCTCGAGCTGCAACAGCGGCACCTCTTACAATTCCA  
TTAGCTCTGTTGATCCCGG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215423 representing NM\_004938  
 Red=Cloning site Green=Tags(s)

```

MTVFRQENVDDYYDTGEELGSGQFAVVKKCREKSTGLQYAAKFIKKRRTKSSRRGVSREDIEREVSILKE
IQHPNVITLHEVYENKTDVILILELVAGGELDFLAEKESL TEEEA TEFLKQILNGVYYLHSLQIAHFDL
KPENIMLLDRNVPKPRIKIIDFGLAHKIDFGNEFKNIFGTPEFVAPEIVNYEPLGLEADMWSIGVITYIIL
LSGASPF LGDTKQETLANVSAVNYEFDEYF SNTSALAKDFIRRLLVKDPKKRMTIQDSLQHPWIKPKDT
QQALSRKASAVNMEKFKKF AARKKWKQSVRLISL CQRLSRSF LRSNMSVARSDDTLDEEDSFVMKAIH
AINDDNV PGLQHLLGSLSNYDVNQPNKHGTPPLLIAAGCGNIQILQLLIKRGSRIDVQDKGGSNAVYWAA
RHGHVDTLKF LSENKCPLDVKDKSGEMALHVAARYGHADVAQLLCSFGSNPNIQDKEEETPLHCAAHWGY
YSVAKALCEAGCNVNIKNREGETPLL TASARGYHDIVECLAEHGADLNACDKDGHIALHLAVRRCQMEVI
KTL LSGQCFVDYQDRHGNTPLHVACKDGNMPIVVALCEANCLDISNKYGRTPHLAANNGILDVVRVLC
LMGASVEALT TDGKTAEDLARSEQHEHVAGLLARLRK DTHRGLFIQQLRPTQNLQPRIK LKLFHGSGSGK
TTLVESLKCGLLR SFFRRRRRPRLSSTNSSRFPPSPLASKPTVSVSINNL YPGCENVSVRSRSMFEPGLT
KGMLEVFVAPTHHPHCSADDQSTKAIDIQNA YLNGVGD FSVWEFSGNPVVFCCYDYFAANDPTSIHV VVF
SLEEPYEIQLNQVIFWL SFLKSLVPVEEPIAFGGK LKNPLQVVLVATHADIMNVP RPAGGEFGYDKD TSL
LKEIRNRF GNDLHISNKL FVLDAGASGSKDMKVLRNHLQEIRSQIVSVCPPMTHLCEKIISTLP SWRKLN
GPNQLMSLQQFVYDVQDQLNPLASEEDLRRIAQQ LHSTGEINIMQSETVQDVL LLDPRWLCTNVLGKLLS
VETPRALH HYRGRYTVEDIQRLVPDSDVEELLQILDAMD ICARDLSSGTMVDV PALIKTDNLHRSWADEE
DEVVMYGGVRI VPVEHLTPFPCGIFHKVQVNL CRWIHQQSTEGDADIRLWVNGCKLANRGAELLVLLVNH
GQGIEVQVRGLETEKIKCCLLLDSVCSTIENV MATTL PGLLTVKH YLSPQQLREHHEPVMIYQPRDF FRA
QTLKETSLTNTMGYKESFSSIMCFGCHDVYSQASL GMDIHASDLNLL TRRKL SRLLDPPDPLGKDWCLL
AMNLGLPDLVAKYNTNNGAPKDFLPSPLHALLREWTTYP ESTVGLTMSK LRELGRRDAADFLLKASSVFK
INLDGNGQEAYASSCNSGTSYNSISSV VSR
    
```

TRTRP LEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6169\\_e06.zip](https://cdn.origene.com/chromatograms/mk6169_e06.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

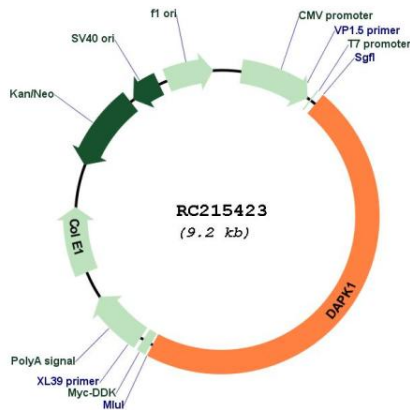


ACCN: NM\_004938

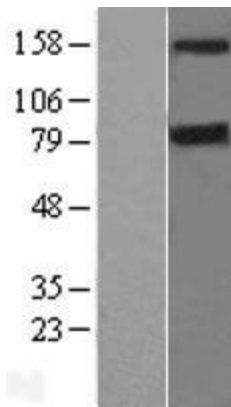
ORF Size: 4290 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_004938.4</a>
<b>RefSeq Size:</b>	5910 bp
<b>RefSeq ORF:</b>	4293 bp
<b>Locus ID:</b>	1612
<b>UniProt ID:</b>	<a href="#">P53355</a>
<b>Cytogenetics:</b>	9q21.33
<b>Domains:</b>	DEATH, pkinase, TyrKc, ANK, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Bladder cancer, Pathways in cancer
<b>MW:</b>	159.9 kDa
<b>Gene Summary:</b>	Death-associated protein kinase 1 is a positive mediator of gamma-interferon induced programmed cell death. DAPK1 encodes a structurally unique 160-kD calmodulin dependent serine-threonine kinase that carries 8 ankyrin repeats and 2 putative P-loop consensus sites. It is a tumor suppressor candidate. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2013]

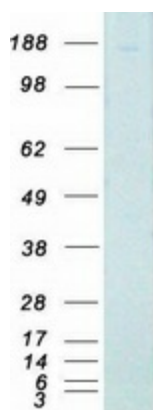
Product images:



Circular map for RC215423



Western blot validation of overexpression lysate (Cat# [LY417640]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215423 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DAPK1 protein (Cat# [TP315423]). The protein was produced from HEK293T cells transfected with DAPK1 cDNA clone (Cat# RC215423) using MegaTran 2.0 (Cat# [TT210002]).