

Product datasheet for **RC218810**

RTKN (NM_001015055) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTKN (NM_001015055) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RTKN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC218810 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTCTCCCGAAACCACCGGAGCCGGGTACCGTGGCCAGGGGCTCCGCCCTGGAGATGGAGTTCAAAC
 GCGGCCGCTTCCGACTCAGCCTCTCAGCGACCTGCCCGAGGACACGGAGTTGCAGAGGAAGCTAGACCA
 TGAGATCCGGATGAGGAAGGGGCTGTAACTGCTGGCAGCCTGCTCCAGCGAGAGCAGGCTCTGGAG
 GCCACCAAGAGCCTGCTAGTGTGCAACAGCCGCATCCTCAGCTACATGGGCGAGCTGCAGCGGCGAAGG
 AGGCGCAGGTGCTGGGAAGACAAGCCGGCGCCCTTCTGACAGTGGCCCGCCGCTGAGCGCTCCCCCTG
 CCGCGCCGGGTGTCATCTCTGACCTCCGATTCCACTCATGTGAAGGACACAGAATATTTCAAGAAC
 AAAGGTGACTGCACCGCTGGGCTGTGTTCTGCTGCTGCAGTGGGGAAACACATCCAGGACACAGAGA
 TGATCCTAGTGGACAGGACCTCACAGACATCTCCTTTCAGAGCAATGTGCTCTTCGCTGAGGCGGGGCC
 AGACTTTGAAGTCCGGTTAGAGCTGTATGGGGCTGTGTGAAGAAGAGGGGGCCCTGACTGGCGGCCCC
 AAGAGGCTTGCCACAAACTCAGCAGCTCCCTGGGCCGCTCCTCAGGGAGGCGTGTCCGGGCATCGCTGG
 ACAGTGTGGGGTTTCAGGGAGCAGTCCCATCTTGCTCCCCACCCAGTTGTTGGTGGTCCCTCGTTACCA
 CCTCTGGCTCACACCACACTCACCTGGCAGCAGTGAAGATGGATTCCGCACACATGACCTCACCCCT
 GCCAGTCATGAGGAGAACCCTGCCTGGCTGCCCTTTATGGTAGCGTGTGTTGCCGTCTGGCAGCTCAGC
 CTCTCTGCATGACTCAGCCACTGCAAGTGGTACCCTCAGGGTGCAGCAAGTGGGGAGATGCAGAACTG
 GGCACAAGTGCATGGAGTTCTGAAAGGCACAACTCTTCTGTTACCGGCAACCTGAGGATGCAGACACT
 GGGGAAGAGCCGCTGCTTACTATTGCTGTCAACAAGGAGACTCGAGTCCGGGCAGGGGAGCTGGACCAGG
 CTCTAGGACGGCCCTTACCCTAAGCATCAGTAACCAAGTATGGGGATGATGAGGTGACACACACCCTTCA
 GACAGAAAGTCGGGAAGCACTGCAGAGCTGGATGGAGGCTCTGTGGCAGCTTTTCTTTGACATGAGCCAA
 TGAAGCAGTGTGTGATGAAATCATGAAAATTGAACTCCTGCTCCCCGAAACCACCCCAAGCACTGG
 CAAAGCAGGGTCTTGTACCATGAGATGGCTATTGAGCCGCTGGATGACATCGCAGCGGTGACAGACAT
 CCTGACCCAGCGGGAGGGCGCAAGGCTGGAGACACCCCACTGGCTGGCAATGTTTACAGACCAGCCT
 GCCCTGCCTAACCCTGCTCGCTGCCTCAGTGGCCCCAGCCCCAGACTGGACCCACCCCTGCCCTGGG
 GGAGACCCGAACCTTTCCCTGGATGCTGTCCCCCAGACACTCCCCTAGGGCTCGCTCGTTGCCCC
 CCTCCACCTCAGCGATCCCACGGACCAGAGGCTCTGCAGCAAAGGCCAACCTCGCACTTGGCTCCAG
 TCACCAGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218810 protein sequence
 Red=Cloning site Green=Tags(s)

MFSRNHRSRVTVARGSALEMEFKRGRFRLSLFSDLPEDTELQRKLDHEIRMREGACKLLAACSQREQALE
 ATKSLLVNCSRILSYMGEIQRKEAQLVGLKTSRRPSDSGPPAERSPCRGRVCISDLRIPLMVKDTEYFKN
 KGDLHRWAVFLLLQLGEHIQDTEMILVDRITLDISFQSNVLF AEAGPDFELRLELYGACVEE GALTGGP
 KRLATKLSSSLGRSSGRRVRASLDSAGSGSSPILLPTPVVGGPRYHLLAHTTLTAAVQDGFRTDHLTL
 ASHEENPAWLPL YGSVCCRLAAQPLCMTQPTASGTLRVQQAGEMQNAQVHGVKGTNLF CYRQPEDADT
 GEEPLLTIAVNKETRV RAGELDQALGRPFTLSISNQYGDDEVHTLQTESREALQSWMEALWQLFFDMSQ
 WKQCCDEIMKIE TPAPRPPQALAKQGS LYHEMAIEPLDDIAAVTDIL TQREGARLET PPPWLAMF TDQP
 ALPNPCSPASVAPAPDWT HPLPWGRPRTFSLDAVPPDHS PRARSVAPLPPQRS PRTRGLCSKQGPRTWLQ
 SPV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6780_c11.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001015055

ORF Size: 1689 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_001015055.2](#)

RefSeq Size: 2208 bp

RefSeq ORF: 1692 bp

Locus ID: 6242

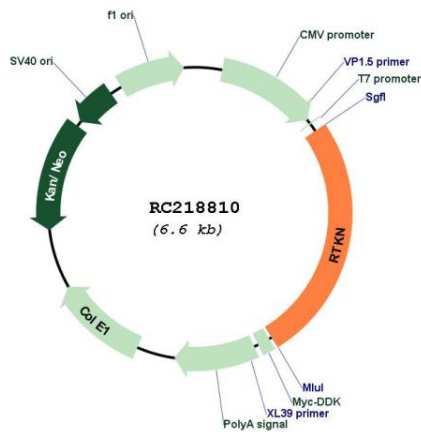
UniProt ID: [Q9BST9](#)

Cytogenetics: 2p13.1

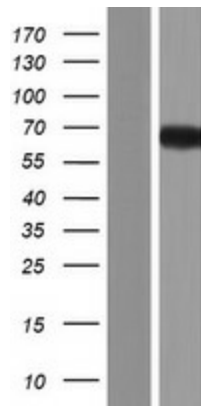
MW: 62.7 kDa

Gene Summary: This gene encodes a scaffold protein that interacts with GTP-bound Rho proteins. Binding of this protein inhibits the GTPase activity of Rho proteins. This protein may interfere with the conversion of active, GTP-bound Rho to the inactive GDP-bound form by RhoGAP. Rho proteins regulate many important cellular processes, including cytokinesis, transcription, smooth muscle contraction, cell growth and transformation. Dysregulation of the Rho signal transduction pathway has been implicated in many forms of cancer. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

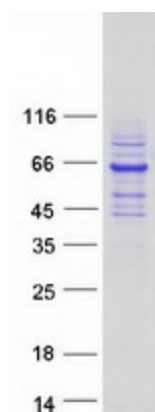
Product images:



Circular map for RC218810



Western blot validation of overexpression lysate (Cat# [LY423121]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218810 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RTKN protein (Cat# [TP318810]). The protein was produced from HEK293T cells transfected with RTKN cDNA clone (Cat# RC218810) using MegaTran 2.0 (Cat# [TT210002]).