

Product datasheet for **RG204517**

RTKN (NM_033046) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTKN (NM_033046) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RTKN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204517 representing NM_033046
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGGACAGATTGCACATCCTGGAGGACCTGAATATGCTCTACATTTCGGCAGATGGCACTCAGCCTGG
 AGGACACGGAGTTGCAGAGGAAGCTAGACCATGAGATCCGGATGAGGGAAGGGCCCTGTAAGCTGCTGGC
 AGCCTGCTCCAGCGAGAGCAGGCTCTGGAGGCCACCAAGAGCCTGCTAGTGTGCAACAGCCGCATCCTC
 AGCTACATGGGCGAGCTGCAGCGCGCAAGGAGGCGCAGGTGCTGGGAAGACAAGCCGGCGGCCTTCTG
 ACAGTGGCCCGCCGCTGAGCGCTCCCCCTGCCGCGCGGGTCTGCATCTCTGACCTCCGGATTCCACT
 CATGTGGAAGGACACAGAATATTTCAAGAACAAGGTGACTTGACCGCTGGGCTGTGTTCTGCTGCTG
 CAGCTGGGGGAACACATCCAGGACACAGAGATGATCCTAGTGGACAGGACCTCAGAGACATCTCCTTTC
 AGAGCAATGTGCTCTTCGCTGAGGCGGGGCCAGACTTTGAACTGCGGTTAGAGCTGTATGGGCGCTGTGT
 GGAAGAAGAGGGGGCCCTGACTGGCGGCCCAAGAGGCTTGCCACCAAACTCAGCAGCTCCCTGGGCGGC
 TCCTCAGGGAGGCGTGTCCGGGCATCGCTGGACAGTGTGGGGGTTACGGGAGCAGTCCCATCTTGCTCC
 CCACCCAGTTGTTGGTGGTCTCGTTACACCTCTTGCTCACACCACACTCACCTGGCAGCAGTGCA
 AGATGGATTCCGCACACATGACCTCACCTTGCCAGTCATGAGGAGAACCCTGCCTGGTGCCCTTTAT
 GGTAGCGTGTGTGCCGTCTGGCAGCTCAGCCTCTCTGCATGACTCAGCCCACTGCAAGTGGTACCCTCA
 GGGTGCAGCAAGCTGGGAGATGCAGAACTGGGCACAAGTGCATGGAGTTCTGAAAGGCACAAACCTCTT
 CTGTTACCGGCAACCTGAGGATGCAGACACTGGGAAGAGCCGCTGCTTACTATTGCTGTCAACAAGGAG
 ACTCGAGTCCGGGCAGGGGAGCTGGACCAAGGCTCTAGGACGGCCCTTACCCTAAGCATCAGTAACCACT
 ATGGGGATGATGAGGTGACACACACCTTCAGACAGAAAGTGGGAAGCACTGCAGAGCTGGATGGAGGC
 TCTGTGGCAGCTTTTCTTTGACATGAGCCAATGGAAGCAGTGTGTGATGAAATCATGAAAATTGAACT
 CCTGCTCCCCGAAACACCCCAAGCACTGGCAAAGCAGGGTCTTGTACCATGAGATGGCTATTGAGC
 CGCTGGATGACATCGCAGCGGTGACAGACATCCTGACCCAGCGGGAGGGCGCAAGGCTGGAGACACCCCC
 ACCCTGGCTGGCAATGTTTACAGACCAGCCTGCCCTGCCTAACCCCTGCTCGCTGCCTCAGTGGCCCCA
 GCCCCAGACTGGACCCACCCCTGCCCTGGGGAGACCCGAACCTTTTCCCTGGATGCTGTCCCCCAG
 ACCACTCCCTAGGGCTCGCTCGGTTGCCCCCTCCACCTCAGCGATCCCCACGGACCAGAGGCCTCTG
 CAGCAAAGGCCAACCTCGCACTTGGCTCCAGTCACCACTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG204517 representing NM_033046
 Red=Cloning site Green=Tags(s)

MQDRLHILEDLNMLYIRQMALSLEDTELQRKLDHEIRMREGACKLLAACSQREQALEATKSLVCNSRIL
 SYMGELQRRKEAQVLGKTSRRPSDGGPPAERSPCRGRVCISDLRIPLMWKDEYFKNKGDLHRWAVFLLL
 QLGEHIQDTEMILVDRTLDISFQSNVFAEAGPDFELRLELYGACVEEEGALTGGPKRLATKLSSSLGR
 SSGRRVRASLDSAGGSGSPIILLPTPVVGGPRYHLLAHTTLTAAVQDGFRTDHLTLASHEENPAWLPLY
 GSVCCRLAAQPLCMTQPTASGTLRVQQAGEMQNAQVHGVKGTNLFQYQPEDADTGEEPLLTIAVNKE
 TRVRAGELDQALGRPFTLSISNQYGDDEVHTLTQTESREALQSWMEALWQLFFDMSQWKQCDEIMKIET
 PAPRKPQALAKQGSLYHEMAIEPLDDIAAVTDILTQREGARLETPPPWLAMFTDQPALPNPCSPASVAP
 APDWTHTPLPWGRPTFSLDAVPPDHSRARSVAPLPPQRSPTRLGLCSKGQPTWLQSPV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_033046

ORF Size: 1650 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_033046.2](#), [NP_149035.1](#)

RefSeq Size: 2638 bp

RefSeq ORF: 1653 bp

Locus ID: 6242

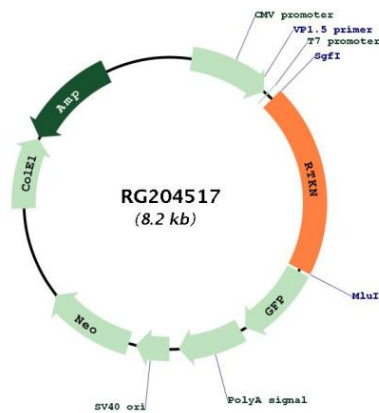
UniProt ID: [Q9BST9](#)

Cytogenetics: 2p13.1

Domains: PH

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 RG204517