

## Product datasheet for **SC321545**

### RTKN (NM\_033046) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RTKN (NM_033046) Human Untagged Clone
Tag:	Tag Free
Symbol:	RTKN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_033046.2  
 GGAAAATTTGTCACAGCAGCCAGAGGGGTTAACAGGAGTGCAGAGGGATAAGGGCAGCT  
 TCTGCCCTCTGCCAAGAGCTGGCCACCTCTTTAAAGACTGAGGGAAACAGTGGGAGGAGG  
 AACTGTGGGACAGTGTGGTACCTATCTGTCCCCCTCTGGAGGGTTGACAAGGGAAAGG  
 GCACCGGGGGGCACAGAGATGCAGGACAGATTGCACATCTGGAGGACCTGAATATGCTC  
 TACATTCGGCAGATGGCACTCAGCCTGGAGGACACGGAGTTGCAGAGGAAGCTAGACCA  
 GAGATCCGGATGAGGGAAGGGGCTGTAAGCTGCTGGCAGCCTGCCAGCGAGAGCAG  
 GCTCTGGAGGCCACCAAGAGCCTGCTAGTGTGCAACAGCCGCATCCTCAGCTACATGGGC  
 GAGCTGCAGCGGCGCAAGGAGGCGCAGGTGCTGGGGAAGACAAGCCGGCGCCTTCTGAC  
 AGTGGCCCGCCGCTGAGCGCTCCCCCTGCCGCGGCGGGTCTGCATCTCTGACCTCCGG  
 ATTCCACTCATGTGAAGGACACAGAATATTTCAAGAACAAGGTGACTTGCACCGCTGG  
 GCTGTGTTCTGCTGCTGCAGCTGGGGAAACACATCCAGGACACAGAGATGATCCTAGTG  
 GACAGGACCTCAGACATCTCCTTTTCAGAGCAATGTGCTCTTCGCTGAGGCGGGGCCA  
 GACTTTGAACTGCGGTTAGAGCTGTATGGGGCCTGTGTGAAGAAGAGGGGGCCCTGACT  
 GCGCGCCCAAGAGGCTTCCACCAAACTCAGCAGCTCCCTGGGCGCTCCTCAGGGAGG  
 CGTGTCCGGGCATCGCTGGACAGTGTGGGGGTTACGGGAGCAGTCCCATCTTGCTCCCC  
 ACCCCAGTTGTTGGTGGTCTCGTTACCACTCTTGGCTCACACCACACTCACCTGGCA  
 GCAGTGAAGATGGATCCGCACACATGACCTCACCTTGCCAGTCATGAGGAGAACCCT  
 GCCTGGCTGCCCTTTATGGTAGCGTGTGTTGCCGTCTGGCAGCTCAGCCTCTCTGCATG  
 ACTCAGCCCACTGCAAGTGGTACCCTCAGGGTGCAGCAAGCTGGGGAGATGCAGAAGTGG  
 GCACAAGTGCATGGAGTTCTGAAAGGCACAACCTCTTCTGTTACCGCAACCTGAGGAT  
 GCAGACTGGGGAAGAGCCGCTGCTTACTATTGCTGTCAACAAGGAGACTCGAGTCCGG  
 GCAGGGGAGCTGGACAGGCTTAGGACGGCCCTTACCCTAAGCATCAGTAACCAAGTAT  
 GGGGATGATGAGGTGACACACACCCTTCAGACAGAAAGTCGGGAAGCACTGCAGAGCTGG  
 ATGAGGCTCTGTGCGACTTTTCTTTGACATGAGCCAATGGAAGCAGTGTGTATGAA  
 ATCATGAAAATTGAACTCCTGCTCCCCGAAACCACCCCAAGCACTGGCAAAGCAGGGG  
 TCCTTGTACCATGAGATGGCTATTGAGCCGCTGGATGACATCGCAGCGGTGACAGACATC  
 CTGACCCAGCGGGAGGGCGCAAGGCTGGAGACACCCCACTGGCTGGCAATGTTTACA  
 GACCAGCTGCCCTGCCTAACCCCTGCTCGCTGCCTCAGTGGCCCCAGCCCCAGACTGG  
 ACCCACCCCTGCCCTGGGGGAGACCCCAACCTTTTCCCTGGATGCTGTCCCCCAGAC  
 CACTCCCCTAGGGCTCGCTCGGTTGCCCCCTCCACCTCAGCGATCCCCACGGACCAGA  
 GGCTCTGCAGCAAAGGCCAACCTCGCACTTGGCTCCAGTCAACAGTGTGAGAGAGAAAG  
 GTGCTGGCATAGGATCTGCCCAGAAGAGAAAATGACCCATGCGCAGTTGGGCTCTGGATA  
 CGGCGCTGTCTATAGCAAGTTGGCCAGTCTGGCCTCCTGTTTCTCTGCTGGACCTGGGGT  
 AGGCTGCAGGGGTGGGCAGAAGCCCTCTTAAATTGTGTTGCCATGGTACCGAGGGACT  
 CATTCTGGGGCTCGCTGGGACCTCCCTAAACCCTTCTGGAAGAAAAGTGAACCAACT  
 CTGCCCTACCTCCCTGCACTAACCAGCTTTGAGGATGGCACTGAAGAACCCTTGGAGCAA  
 ACATACCTCCCTTGTGACTCCCACATCAACCATTAAAGTTATTTAACAGCAAAAAAAAAA  
 AAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_033046

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

<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>	<u><a href="#">NM_033046.2</a></u> , <u><a href="#">NP_149035.1</a></u>
<b>RefSeq Size:</b>	2638 bp
<b>RefSeq ORF:</b>	1653 bp
<b>Locus ID:</b>	6242
<b>UniProt ID:</b>	<u><a href="#">Q9BST9</a></u>
<b>Cytogenetics:</b>	2p13.1
<b>Domains:</b>	PH
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and coding region, compared to variant 1. The encoded protein (isoform b) is shorter and has a distinct N-terminus, compared to isoform a.</p>