

## Product datasheet for **RG216231**

### **RIPX (RUFY3) (NM\_001037442) Human Tagged ORF Clone**

#### Product data:

|                           |                         |
|---------------------------|-------------------------|
| Product Type:             | Expression Plasmids     |
| Tag:                      | TurboGFP                |
| Symbol:                   | RIPX                    |
| Synonyms:                 | RIPX; SINGAR1; ZFYVE30  |
| Mammalian Cell Selection: | Neomycin                |
| Vector:                   | pCMV6-AC-GFP (PS100010) |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |



**ORF Nucleotide Sequence:** >RG216231 representing NM\_001037442  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCTGCTCTGACGCCTCCGACCGATATGCCAACCCCACTGACAAGATCACACAGGCTGCCATG  
 AGACCATCTACCTTTGCAAATTCAGAGTGCCATGGATGGAGAATGGCTCTGCCTGCGAGAGCTGGATGA  
 CATCTCACTTACACCTGACCCAGAGCCTACCCATGAAGATCCTAATTATCTCATGGCTAATGAACGCATG  
 AACCTCATGAACATGGCCAAGCTGAGTATCAAGGGCTTGATGAATCAGCTCTGAACCTGGGAGGAGCTC  
 TTGACTCTGACTATGCACCTCTCCAGCAATCTTTGTGGTGATGGAGCACTGTCTGAAACATGGCTTGAA  
 AGCTAAAAAACTTTCTCGGACAAAATAAATCCTTCTGGGGCCCTCTAGAACTGGTAGAAAAAGCTTGTT  
 CCAGAAGCCGAGAGATAACAGCAAGTGTTAAAGATCTTCCAGGACTTAAGACACCAGTAGGTAGAGGAA  
 GAGCCTGGCTTCGTTTGCATTAATGCAAAAGAACTTTGAGAATATATGAAAGCTTTGATCAATAAGAA  
 AGAAGCTTCTCAGTGAATCTACGAACCAATGCCCTCATGATGGAAGAAGAAGGAGCCATAATTGCTGGT  
 CTGTTGGTGGGTCTGAATGTCAATTGATGCCAATTTCTGTATGAAAGGAGAAGACTTGGACTCTCAGGTTG  
 GAGTTATAGATTTTTCAATGTATCTCAAGGACGGGAACAGCAGTAAAGGTACTGAAGGAGACGGTCAGAT  
 TACTGCAATCTGGACCAGAAGAACTATGTAGAAGAACTGAACAGACATTTGAATGCTACTGTAAACAAC  
 CTTCAGGCAAAAGTAGATGCATTAGAAAAATCCAACCTAACTGACAGAGGAGCTTGCAAGTTGCAACA  
 ACAGGATCATTACCTTACAAGAAGAAATGGAACGAGTTAAAGAGGAAAGTTCCCTACATACTGGAATCCAA  
 TCGGAAGGGTCCCAAGCAAGACAGAACTGCAGAAGGGCAAGCACTAAGTGAAGCAAGAAAGCATTAAAA  
 GAAGAGACACAATTACGATTGGATGTTGAGAAAGAACTGGAGATGCAGATCAGCATGAGGCAGGAGATGG  
 AATTGGCTATGAAGATGCTGGAGAAGGATGTCTGTGAGAAGCAGGATGCCCTGGTATCTCTTCGGCAGCA  
 GCTGGATGACCTCAGAGCTCTCAAGCATGAATTCGCTTTAAGCTGCAGAGTTAGAGCTTAGGAGTAAAA  
 CAGAAAAGTGAAGTAAACAGTCGCTTGAAGAGAAGACTAATCAGATGGCTGCTACCATTAACAACCTTG  
 AACAAAGATTGCGCCAGGCTGAGCGAAGCCGCCAATCTGCTGAGTTGGACAACCGGCTCTTCAAACAGGA  
 CTTTGGAGACAAGATCAACAGTCTGCAGCTGGAAGTCGAGGAGCTCACCAGGCAGCGGAACCAAGCTTGAG  
 TTAGAAGTAAACAGGAAAAAGAAAGAAATTACAAAACGACAGGAGCATCCCAAGGAAGGGTTCCAGAG  
 AGTCAGAATCCAAGATGGATGGGAAGCACAAAATGCAAGAGGAAAAATGTTAAACTAAAAAGCCCTGGA  
 AGAAAGCCACAGGCTGCAACCCACCCTATGGATGAACAGGATCAGCTGCTGCTCTGAAAAGCCACAG  
 TTGTGTCAGCTATGCCAGGAAGACGGCAGCCTAACAAAGAAATGTGTGAAGAACTGCAGCGGAACCTTCT  
 GTGATGCCTGTTCAACAAATGAAGTGCCTCTTCTTCAAGTATCAAGCTTGAGCGAGTTTGAATCCCTG  
 TCACAAGCATCTGATGAAGCAATATTCTACCAGCCATCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG216231 representing NM\_001037442  
 Red=Cloning site Green=Tags(s)

MSALTPTDMPPTTDKITQAAMETIYLCKFRVSMDSGEWLCLRELDISLTPDPEPTHEPDNYLMANERM  
 NLMNMAKLSIKGLIESALNLGRTLDSDYAPLQQFFVMEHCLKHGLKAKKTFLGQNKSFWGPLELVEKL  
 PEAAEITASVKDLPGLKTPVGRGRAWLRLALMQKKLSEYMKALINKKELSEFYEPNALMMEEEGAIAG  
 LLVGLNVIDANFCMKGEDLDSQVGVDFSMYLDGNSKSGTEGDGQITAILDQKNYVEELNRHLNATVNN  
 LQAKVDALEKSNTKLTEELAVANNRIITLQEEMERVKEESSYILESNRKGPKQDRTAEGQALSEARKHLK  
 EETQLRLDVEKELEMQISMRQEMELAMKMLEKDVCEKQDALVSLRQQLDLRALKHELAFKLQSSDLGVK  
 QKSELNSRLEEKTNQMAATIKLEQLRQAERSRQSAELDNRLFQDQFQDKINSLQLEVEELTRQRNQL  
 LELKQEKERRLQNDRSIPGRGSQKSESKMDGKHKMQEENVKLKPLEESHRLQPHPMDEQDQLLSEKPO  
 LCQLCQEDGSLTKNVCKNCSGTFCDACSTNELPLPSSIKLERVCNPKHLMKQYSTSPS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



**ACCN:** NM\_001037442

**ORF Size:** 1860 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.

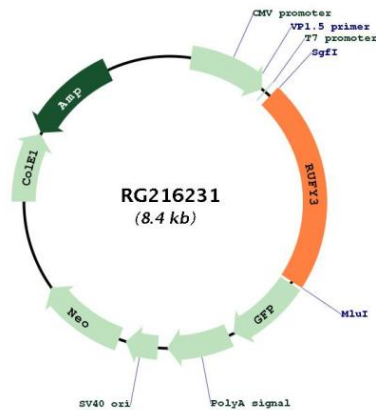
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001037442.4](#)

**RefSeq Size:** 2991 bp  
**RefSeq ORF:** 1863 bp  
**Locus ID:** 22902  
**UniProt ID:** [Q7L099](#)  
**Cytogenetics:** 4q13.3

**Gene Summary:** This gene encodes a RPIP8, UNC-14, and NESCA domain-containing protein that is required for maintenance of neuronal polarity. In addition, it has been implicated in mediation of gastric cancer cell migration and invasion via interaction with P21-activated kinase-1, which promotes its expression. The encoded protein localizes to F-actin-enriched invadopodia to induce formation of protrusions, thereby facilitating cell migration. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2016]

### Product images:



Circular map for RG216231