

## Product datasheet for **RG239195**

### **FARP2 (NM\_001282983) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FARP2 (NM_001282983) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FARP2
Synonyms:	FIR; FRG; PLEKHC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG239195 representing NM\_001282983.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGGGGAGATAGAAGGAACATACAGAGTCCTGCAGACTGCAGGGATGCGCTTGGGTGCCAGACCCCT
GTGGGAGTTAGCACCCCTTGAGCCTGGGCAGACTCTTTGCCAGAATGCAAGAGAAGCACCTGCACCTC
AGAGTAAAGCTGCTGGACAACCCATGGAAATATTTGACATTGAGCCTAAATGCGATGGCCAGGTATTA
CTGACACAAGTGTGAAGCGTTTAAACCTGGTAGAATGTGACTACTTCGGGATGGAGTTTCAAATACT
CAGTCCTACTGGATTTGGCTTGAACCTATGAAACCCATCATTAGGCAAATACGAAGGCCAAAGAATGTG
GTGCTTCGCTAGCTGTAAAATTTTTCCACCTGATCCTGGTCAGCTACAAGAAGAATATAACAAGATAC
TTGTTTGCCTTGCAACTAAGAGAGACCTGCTGGAAGAGCGTTTGACCTGTGCTGACACCACAGCGGCC
CTTCTCACGTCCCATCTCCTGCAGTCGGAAATAGGAGATTACGATGAAACGCTGGACCGAGAGCACCTC
AAAGTGAACGAGTATTTGCCTGGCCAGCAGCACTGCCTTGAGAAGATACTAGAATCCATCAGAAGCAC
GTGGGCCAGACACCTGCTGAGTCGGATTTCCAGGTGCTCGAAATTGCTCGAAAGTTGAAATGTACGGC
ATCAGATTTACATGGCTTCTGACAGGGGAAGGAACCAAGATTCAGTGGCAGTTTCCACATGGGTGTA
CTCGTGTTCAGGGCACCACAAAATCAACACTTTCAACTGGTCCAAGGTCGGTAAACTAAGCTTCAAG
AGGAAAAGATTTCTTATCAAACCTCATCCAGAGGTTTATGGACCTTACCAGGACACATTAGAATTTTTG
TTGGGTAGTAGAGATGAATGTAAGAACTTCTGGAAGATTTGTGTGGAGTATCACACCTTTTTTAGACTT
TTGGACCAACCTAAGCCAAAAGCAAAGCCGCTTCTTTCAGCCGGGGCTCCTCCTCAGATACAGTGGA
AGAAGTCAAGAACTAGTAGATTATTTCAAAGACAGTGAATGAAGAGAATCCATATGAAAGAAGG
CACAGCAAGACCCACACGTCCGTTGAGCTCTGACTGCAGACCTACAAAACAGAGCATCTCATTCCCC
GAGGGATTGAGGACTCCTGCCTCCCATCTTCAGCGAATGCCTTTTACTCGCTCTCTCCCTCCACTCTG
GTCCCCTCTGGCCTGCCAGAGTTTAAAGGACAGCAGCAGCTCCCTCACAGATCCCCAGGTTTCTAGTTC
AAGAGTCCAGCTGCAGAGAGGCGCAGTGGAGCAGTGGCTGGAGGCCCGACACACCATCGGCCAGCCC
CTCGGGCCCCCGCACTCCAGCCTGGTCCAGGCCTTTCCACGAAGAGTCCCTCAGCCTTCTCCCTCCAGC
CGGAAGAGCCCCCTGAGTCTGAGCCCTGCATTTCCAGGTGCCTTTGGGCCAGCTGAACAGGGCTCATCC
CCACTCCTGAGCCCTGTCTCAGTGATGCTGGCGGAGCCGGATGGACTGCGAGGAGCCAGACACAAG
CGCGTGCCTGCAGACGAGGCCTACTTCATAGTCAAAGAGATTCTCGCTACAGAACGAACATACCTCAAG
GATTTAGAAGTTATTACCGTGTGGTCCGACGCGCAGTGGTGAAGGAGGACGCCATGCCTGCGACTCTG
ATGACGCTGCTCTTCTCAACATCGATCCCATCTATGAGTTCACAGAGGCTTCTGCGGAGGTGGAG
CAGAGGCTGGCACTCTGGGAAGGGCCCTCAAAGCCACACAAAAGGCAGTCATCAACGAATCGGGGAC
ATCCTGCTCAGGAACATGCGCCAGTTAAAGGTGTTCCAGCTCCACGAAGGGCATGTAGCAGGGGTACA
AAAATGGAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

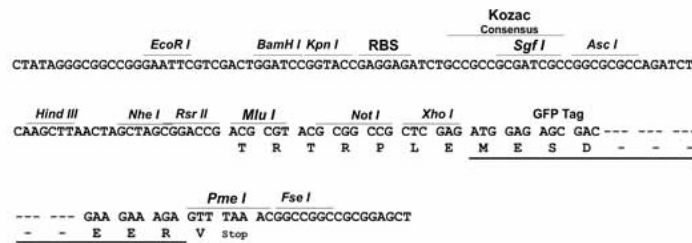
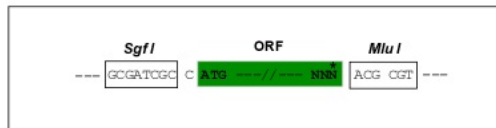
Protein Sequence: >Peptide sequence encoded by RG239195  
 Blue=ORF Red=Cloning site Green=Tag(s)

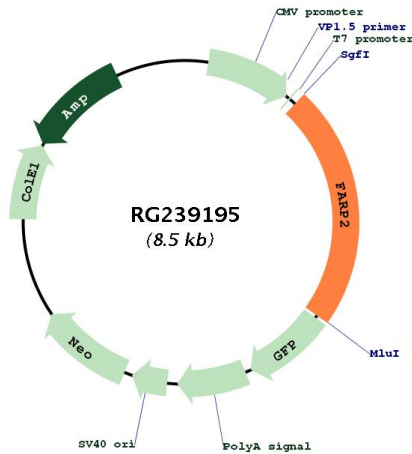
MGEIEGTYRVLQTAGMRLGAQTPVGVSTLEPGQTLLPRMQEKHLHLRVKLLDNTMEIFDIEPKCDGQVL  
 LTQVWKRNLNVECDYFGMEFQNTQSYWIWLEPMKPIIRQIRRPKNVLRVAVKFFPPDPGQLQEEYTRY  
 LFAQLKRDLEERLTCADTTAALLTSHLLQSEIGDYDETLDREHLKVNLYLPGQQHCLEKILEFHQKH  
 VGQTPAESDFQVLEIARKLEMYGIRFHMASDREGTKIQLAVSHMGVLFVQGTTKINTFNWSKVRKLSFK  
 RKRFLLIKLHPEVHGPYQDTLEFLLGSRDECKNFWKICVEYHTFFRLLDQPKPKAKAVFFSRGSSFRYSG  
 RTQKQLVDYFKDSGMKRIPIYERRHKTHTSVRALADLPKQISFPEGLRTPASPSSANAFYSLSPSTL  
 VPSGLPEFKDSSSSLTDPQVSYVKSPAERRSGAVAGGPDTPSAQPLGPPALQPGPLSTKSPQSPSS  
 RKSPSLSPAFAQVPLGPAEQSSPLLSPVLSDAGGAGMDCEEPRHKRVPADAEAYFIVKEILATERTYLK  
 DLEIVTVWFRSAVVKEDAMPATLMTLLFSNIDPIYEFHRGFLREVEQRLALWEGPSKAHTKGSHQRI  
 ILLRNMRQLKVFQLHEGHVAGVTKME  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_001282983

**ORF Size:** 1941 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).

**RefSeq:** [NM\\_001282983.2](#)

**RefSeq Size:** 2651 bp

**RefSeq ORF:** 1944 bp

**Locus ID:** 9855

**UniProt ID:** [O94887](#)

**Cytogenetics:** 2q37.3

**Protein Pathways:** Adherens junction

**MW:** 73.7 kDa

**Gene Summary:** Functions as guanine nucleotide exchange factor that activates RAC1. May have relatively low activity. Plays a role in the response to class 3 semaphorins and remodeling of the actin cytoskeleton. Plays a role in TNFSF11-mediated osteoclast differentiation, especially in podosome rearrangement and reorganization of the actin cytoskeleton. Regulates the activation of ITGB3, integrin signaling and cell adhesion (By similarity).[UniProtKB/Swiss-Prot Function]