

## Product datasheet for **RG239694**

### Epac2 (RAPGEF4) (NM\_001282899) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Epac2 (RAPGEF4) (NM_001282899) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Epac2
Synonyms:	CAMP-GEFII; CGEF2; EPAC; EPAC 2; EPAC2; Nbla00496
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG239694 representing NM\_001282899.  
 Blue=ORF Red=Cloning site Green=Tag(s)

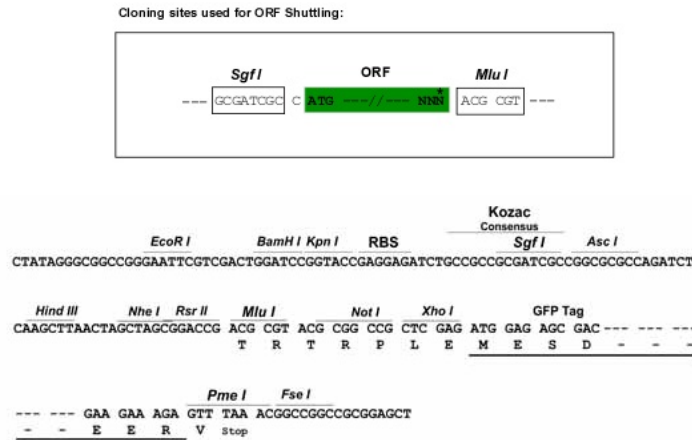
```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGCAGGACTTCTGGCTCCTCCTTATGGTGTATGGAAACGGGCTCTAACAAATGACAGGATTCCTGAC
AAGGAGAACACACCTCTCATTGAACCTCACGTTCCCTCTTCGTCTGCTAACACCATTACCAAGTCCCT
TCAGAGAAGATCCTCAGAGCTGGAAAAATTTTACGAAATGCCATTCTCTCGAGCACCTCACATGATA
AGAGATAGAAAAATACCACCTAAAGACATACAGACAATGCTGTGTGGAACTGAACTGGTGGACTGGATG
ATGCAGCAGACACCATGTGTTCACTCCCGGACTCAAGCTGTTGGCATGTGGCAAGTCTGTGTAAGAT
GGTGTCTCAACCACGTGGACCAGGAGCACCATTCCAAGACAAAATTTATTCTATCGATTTCTGGAT
GATGAGCAGGAGATGCCCTTTGCCTACTGAGGAGGAGAAGAAGGAGTGTGATGAGGAGCTCCAGGAC
ACCATGCTGCTGTGCACAGATGGGCCCGACGCCACATGAGGATGATCCTTCGCAAACACCTGGC
CAGAGGACTGTGGATGACCTAGAGATTATCTATGAGGAGCTTCTCATATTAAGCCTTATCCCATCTT
TCTACCACAGTGAACGAGAGTTAGCAGGTGTTCTCATTTTTGAGTCTCACGCCAAAGGAGGGACTGTG
TTGTTTAAACAGGGGGAAGAAGGTACCTCCTGGTACATTATTCTAAAAGGATCAGTGAATGTAGTCAAT
TACGGCAAGGGTGTGGTCTGCACCCTGCATGAAGGAGATGACTTCGGCAAGTTAGCACTAGTGAATGAT
GCCCCACGAGTGCCTCTATCGTCTTACGAGAAGATAACTGCCATTTCTTAAGAGTAGACAAGGAGGAT
TTCAACCCGGATCCTAAGGGACGTGGAGGCGAATACAGTCAGACTTAAAGAACATGACCAAGATGTCTTG
GTGCTGGAGAAGTCCCAGCAGGGAACAGAGCTTCTAATCAAGGAAACTCACAGCCTCAGCAAAAGTAT
ACTGTGATGTGAGAACACCTGAAAAATTTTAGAGCATTTTCTAGAAACAATACGCCTTGAGGCAACT
TTAAATGAAGCAACAGATTCTGTTTTAAATGACTTTATATGATGCACTGTGTTTTATGCCAAATACC
CAGCTTTGCCCGCACTGGTGGCCACTACCACGCACAGCCTTACAAGGTACAGAACAGGAGAAAATG
GATTATGCCCTCAACAATAAGAGGCGAGTCATCCGCCTGGTTCTACAGTGGCTGCCATGTATGGAGAC
CTCCTGCAAGAGGATGACGTGTCTATGGCCTCCTGGAGGAGTTTTATGTATCTGTATCAGATGATGCC
CGGATGATTGCTGCCCTCAAGGAGCAACTGCCAGAGTTGGAGAAGATTGTCAAGCAAATCTCAGAAGAT
GCAAAGGCACCACAAAAGAAGCACAAGTTCTTTTGAACAGTTCAATACGGGCGATGAGAGAGCCAG
AAGCGCCAGCCTATCCGCGGCTCTGATGAAGTTCTGTTTAAAGTCTATTGCATGGACCACACCTACACA
ACCATTCCGGTGCCAGTGGCCACTTCGGTGAAGGAAGTCATCAGTGCAGTTGCCACAAGCTGGGCTCC
GGGAGGGCCTGATCATAGTCAAGATGAGTTCGGGAGGAGAAAAGGTGGTCTCAAACCTAATGATGTT
TCAGTATTACGACGCTCACCATTAATGGACGCCTGTTTGCTTGCCCGGAGAGCAATTCGATTCAGT
ACTCCCTTACCAGAACAGGAAGGCCAACTGTTGGAACAGTGGGAACTTTTGAAGTATGAGCTCCAAA
GATTTAGCATACCAGATGACAATTTATGATTGGGAACTCTTCAACTGCGTGCATGAGCTGGAGCTAATC
TATCACACATTTGGAAGGCATAATTTAAAAAGACCACAGCAAATTTGGATTTGTTCTGAGGAGATTT
AATGAAATTCAGTTTTGGGTCTGACTGAGATCTGCCTTTGTTCTCAGCTCAGCAAGCGTGTTCAGCTA
TTAAAAAATTTATTAAGATAGCAGCCACTGTAAAGGAGTAAAAATCTGAATTCCTTTTTTGGCATC
GTCATGGGACTAAGTAACGTTGCTGTGAGCCGCTTGGCACTAACGTGGGAGAACTGCCAAGCAAGTTC
AGAAGTCTATGCGGAGTTTGAAGTTTAAATGGACCCCTCAAGGAACACAGGGCCTACAGGCTGACA
GTAGCTAAGCTGGAACCTCCTCTCATCCCTTCATGCCTTGTCTATTAAAGATATGACATTTACTCAT
GAGGGGAACAAGACGTTTATTGACAATCTAGTAACTTTGAAAAAATGCGCATGATTGCAAAATACGGCC
AGAACAGTGAGATACTACAGGAGCAACCTTCAATCCTGATGCAGCTCAAGCTAATAAGAACCATCAG
GATGTCCGGAGTTATGTACGGCAATTAATGTGATTGACAACAGAGAAGTTTATCACAGATGTCACAC
AGATTAGAGCCTCGTCGACCA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG239694  
 Blue=ORF Red=Cloning site Green=Tag(s)

MAGLLAPPYGVMETGSNNDRIPDKENTPLIEPHVPLRPANTITKVPSEKILRAGKILRNAILSRAPHMI  
 RDRKYHLKTYRQCCVGTTELVDWMMQQTPCVHSRTQAVGMWQVLLLEDGVLNHVDQEHHFQDKYLFYRFLD  
 DEHEDAPLPTEEEKKECDEELQDTMLLLSQMGPDAMRMILRKPPGQRTVDDLEIIEELLHIKALSHL  
 STTVKRELAVLIFESHAKGGTVLFNQGEEGTSWYIILKGSVNVVIYKGVVCTLHEGDDFGKLALVND  
 APRAASIVLREDNCHFLRVKEDFNRIIRDVEANTVRLKEHDQDVLVLEKVPAGNRASNQNSQPQKY  
 TVMSGTPEKILEHFLETIRLEATLNEATDSVLNDFIMMHCVFMPNTQLCPALVAHYHAQPSQGTEQEKM  
 DYALNNKRRVIRLVLQWAAMYGDLLQEDDVSMAFLEEFYVSDDARMIAALKEQLPELEKIVKQISED  
 AKAPQKKHKVLLQQFNTGDERAQKRQPIRGSDVLFKVYCMDHTYTTIRVPVATSVKEVISAVADKLG  
 GEGLIIVKMSSGGEKVVLPNDVSFVTTLTINGRLFACPREQFDSLTPLEQEGPTVGTGTGTFELMSSK  
 DLAYQMTIYDWELFNCVHELELIYHTFGRHNFKTTANLDLFLRRFNEIQFVWVTEICLCSQLSKRVQL  
 LKKFKIAAHCKEYKNLNSFFAIVMGLSNVAVSRLALTWEKLPKFKKFAEFESLMDPSRNRHAYRLT  
 VAKLEPPLIPFMPLLIKDMFTTHEGNKTFIDNLVNF EKMRMIANTARTVRYRYSQPFNPDAQAANKNHQ  
 DVRSYVRQLNVIDNQRTLQMSHREPRRP  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP  
 SVIFTDKIIIRS NATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHF KSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001282899

ORF Size: 2574 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).

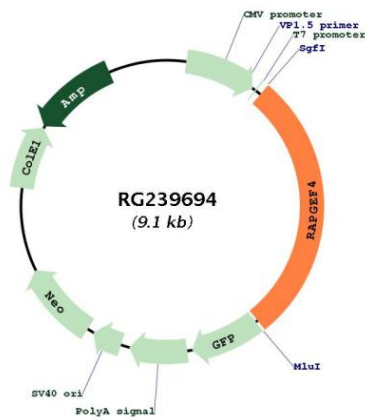
RefSeq: [NM\\_001282899.2](#)

RefSeq Size: 3991 bp

RefSeq ORF: 2577 bp

**Locus ID:** 11069  
**UniProt ID:** [Q8WZA2](#)  
**Cytogenetics:** 2q31.1  
**Protein Pathways:** Leukocyte transendothelial migration  
**MW:** 98.7 kDa  
**Gene Summary:** Guanine nucleotide exchange factor (GEF) for RAP1A, RAP1B and RAP2A small GTPases that is activated by binding cAMP. Seems not to activate RAB3A. Involved in cAMP-dependent, PKA-independent exocytosis through interaction with RIMS2 (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG239694