

## Product datasheet for **RG226129**

### **MARK3 (NM\_001128919) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MARK3 (NM_001128919) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MARK3
Synonyms:	CTAK1; KP78; Par-1a; PAR1A; VIPB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG226129 representing NM\_001128919  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCACTAGGACCCCATTTGCCAACGGTGAATGAACGAGACACTGAAAACCACACGTCACATGGAGATG  
 GCGTCAAGAAGTTACCTCTCGTACCAGCCGCTCAGGAGCTCGGTGTAGAACTCTATAGCCTCCTGTGC  
 AGATGAACAACCTCACATCGGAACTACAGACTGTTGAAAAAATCGGCAAGGGGAATTTTGCAAAAGTA  
 AAATTGGCAAGACATATCCTTACAGGCAGAGAGTTGCAATAAAAATAATTGACAAAACCTCAGTTGAATC  
 CAACAAGTCTACAAAAGCTCTTCAGAGAAGTAAGAATAATGAAGATTTTAAATCATCCCAATATAGTGAA  
 GTTATTCGAAGTCATTGAAACTGAAAAACACTCTACCTAATCATGGAATATGCAAGTGGAGGTGAAGTA  
 TTTGACTATTTGGTTGCACATGGCAGGATGAAGGAAAAAGAAGCAAGATCTAAATTTAGACAGATTGTGT  
 CTGCAGTTCAATACTGCCATCAGAAACGGATCGTACATCGAGACCTCAAGGCTGAAAATCTATTGTTAGA  
 TGCCGATATGAACATTAATAAGCAGATTTTCGGTTTTAGCAATGAATTTACTGTTGGCGGTAACCTCGAC  
 ACGTTTTGTGGCAGTCTCCATACGCAGACCTGAGCTCTCCAGGGCAAGAAATATGACGGGCCAGAAG  
 TGGATGTGTGGAGTCTGGGGTCAATTTATACACACTAGTCAGTGGCTCACTTCCCTTTGATGGGCAAAA  
 CCTAAAGGAAGTGAAGAGAGAGATTAAGAGGGAAATACAGAATTCCTTCTACATGTCTACAGACTGT  
 GAAAACCTTCTCAAACGTTTCTGGTGCTAAATCCAATTAACCGCGCACTCTAGAGCAAATCATGAAGG  
 ACAGGTGGATCAATGCAGGGCATGAAGAAGTGAACCAACCATTTGTTGAACCAGAGCTAGACATCTC  
 AGACAAAAAAGAATAGATATTAGGTGGGAATGGGATATTCACAAGAAGAAATCAAGAATCTCTTAGT  
 AAGATGAATACGATGAAATCACAGCTACATATTTGTTATTGGGGAGAAAATCTCAGAGCTGGATGCTA  
 GTGATCCAGTTCTAGCAGCAATCTTTCACTTGTCAAGTTAGGCCGAGCAGTGATCTCAACAACAGTAC  
 TGGCCAGTCTCCTCACCACAAAGTGCAGAGAAGTGTTCCTTCAAGCCAAAAGCAAAGACGCTACAGTGAC  
 CATGCTGGACCAGCTATTCCTTCTGTTGTGGCGTATCCGAAAAGGAGTCAGACCAGCACTGCAGATAGTG  
 ACCTCAAAGAAGATGGAATTTCTCCCGGAAATCAAGTGGCAGTGTGTTGGAGGAAAGGAATTGCTCC  
 AGCCAGTCCCATGCTTGGGAATGCAAGTAATCCTAATAAGGCGGATATTCCTGAACGCAAGAAAAGCTCC  
 ACTGTCCCTAGTAGTAACACAGCATCTGGTGGAAATGACACGACGAAATACTTATGTTGTCAGTGAGAGAA  
 CTACAGCTGATAGACACTCAGTGATTGAGAATGGCAAAGAAAACAGCACTATTCTGATCAGAGAACTCC  
 AGTTGCTTCAACACACAGTATCAGTAGTGCAGCCACCCAGATCGAATCCGCTTCCCAAGAGGCACTGCC  
 AGTCGTAGCACTTCCACGGCCAGCCCCGGGAACGGCGAACCGCAACATATAATGGCCCTCCTGCCTCTC  
 CCAGCCTGTCCCATGAAGCCACACCATTGTCCCAGACTCGAAGCCGAGGCTCCACTAATCTTTAGTAA  
 ATTAACCTCAAAAACCTACAAGGAGGCTTCCAACCTGAATATGAGAGGAAACGGGAGATATGAGGGCTCAAGT  
 CGCAATGTATCTGCTGAGCAAAAAGATGAAAACAAAGAAGCAAAGCCTCGATCCCTACGCTTACCTGGA  
 GCATGAAAACCACTAGTTCAATGGATCCCGGGGACATGATGCGGGAAATCCGCAAAGTGTGGACGCCAA  
 TAACTGCGACTATGAGCAGAGGGAGCGCTTCTTGTCTTCTGCGTCCACGGAGATGGGCACGCGGAGAAC  
 CTCGTGCAGTGGGAAATGGAAGTGTGCAAGCTGCCAAGACTGTCTCTGAACGGGGTCCGGTTTAAGCGGA  
 TATCGGGACATCCATAGCCTTCAAAAATATTGCTTCAAAAATTGCCAATGAGCTAAAGCTG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:** >RG226129 representing NM\_001128919  
Red=Cloning site Green=Tags(s)

MSTRTPPLPTVNERDTENHTSHGDGRQEVTSRTSRSGARCRNSIASCADEQPHIGNYRLKLTIGKGNFAKV  
 KLARHILTGREVAIKIIDKTQLNPTSLQKLFREVRIMKILNHPNIVKLFVIEETEKTLYLIMEYASGGEV  
 FDYLVAHGRMKEKEARSKFRQIVSAVQYCHQKRIVHRDLKAENLLLDADMNIKIADFGFSNEFTVGGKLD  
 TFCGSPPYAAPELFGGKKYDGPEDVWSLGVILYTLVSGSLPFDGQNLKELRERVLRGKYRIPFYMSTDC  
 ENLLKRFLVLPNIKRGTLQIMKDRWINAGHEEDELKPFVEPELDISDQKRIDIMVGMGYSQEEIQESLS  
 KMKYDEITATYLLLGRKSSELDASDSSSSNLSLAKVRPSSDLNNSTGQSPHHKVQRSVFSQKQRRYS  
 HAGPAIPSVVAYPKRSQTSTADSDLKEDGISSRKSSGSAVGGKIAPASPMLGNASNPNKADIPERKSS  
 TVPSSNTASGGMTRRNTYVCSERTTADRHSVIQNGKENSTIPDQRTPVASTHSISSAATPDRIRFPRGTA  
 SRSTFHGQPRERTATYNGPPASPSLSHEATPLSQTRSRGSTNLFSKLTSKLTRRLPTEYERNGRYEGSS  
 RNVSAEQDENKEAKPRSLRFTWSMKTSSMDPGDMMREIRKVL DANNC DYEQRERFLLCVHGDGHAEN  
 LVQWEMEVCKLPRLSLNGVRFKRISGTSIAFKNIASKIANELKL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001128919

**ORF Size:** 2232 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.

**RefSeq:** [NM\\_001128919.1](#), [NP\\_001122391.1](#)

**RefSeq Size:** 3519 bp

**RefSeq ORF:** 2235 bp

**Locus ID:** 4140

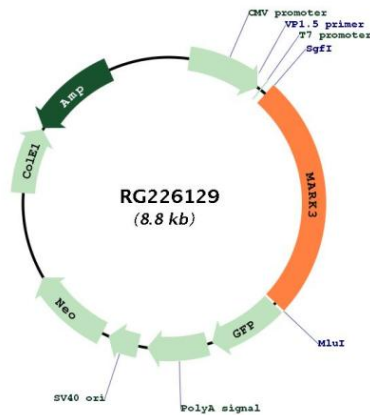
**UniProt ID:** [P27448](#)

**Cytogenetics:** 14q32.32-q32.33

**Protein Families:** Druggable Genome, Protein Kinase

**Gene Summary:** The protein encoded by this gene is activated by phosphorylation and in turn is involved in the phosphorylation of tau proteins MAP2 and MAP4. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

**Product images:**



Circular map for RG226129