

## Product datasheet for **RG205758**

### MARK3 (NM\_002376) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MARK3 (NM_002376) 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)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RG205758 representing NM\_002376  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCACTAGGACCCCATTTGCCAACGGTGAATGAACGAGACACTGAAAACCACACGTCACATGGAGATG  
 GCGTCAAGAAGTTACCTCTCGTACCAGCCGCTCAGGAGCTCGGTGTAGAACTCTATAGCCTCCTGTGC  
 AGATGAACAACCTCACATCGGAACTACAGACTGTTGAAAAAATCGGCAAGGGGAATTTGCAAAAAGTA  
 AAATTGGCAAGACATATCCTTACAGGCAGAGAGTTGCAATAAAAATAATTGACAAAACCTCAGTTGAATC  
 CAACAAGTCTACAAAAGCTCTTACAGAGAAGTAAGAATAATGAAGATTTTAAATCATCCCAATATAGTGAA  
 GTTATTGCAAGTCATTGAAACTGAAAAACACTCTACCTAATCATGGAATATGCAAGTGGAGGTGAAGTA  
 TTTGACTATTTGGTTGCACATGGCAGGATGAAGGAAAAAGAAGCAAGATCTAAATTTAGACAGATTGTGT  
 CTGCAGTTCAATACTGCCATCAGAAACGGATCGTACATCGAGACCTCAAGGCTGAAAATCTATTGTTAGA  
 TGCCGATATGAACATTAATAAGCAGATTTTCGGTTTTAGCAATGAATTTACTGTTGGCGGTAACCTCGAC  
 ACGTTTTGTGGCAGTCTCCATACGCAGACCTGAGCTCTCCAGGGCAAGAAATATGACGGGCCAGAAG  
 TGGATGTGTGGAGTCTGGGGTCAATTTATACACACTAGTCAGTGGCTCACTTCCCTTTGATGGGCAAAA  
 CCTAAAGGAACTGAGAGAGAGATTAAGAGGGAAATACAGAATTCCTTCTACATGTCTACAGACTGT  
 GAAAACCTTCTCAAACGTTTCTGGTGCTAAATCCAATTAACCGCGGCACTCTAGAGCAAATCATGAAGG  
 ACAGGTGGATCAATGCAGGGCATGAAGAAGATGAACTCAAACATTTGTTGAACCAGAGCTAGACATCTC  
 AGACAAAAAAGAATAGATATTAGGTGGGAATGGGATATTCACAAGAAGAAATCAAGAATCTCTTAGT  
 AAGATGAAATACGATGAAATCACAGCTACATATTTGTTATTGGGGAGAAAATCTCAGAGCTGGATGCTA  
 GTGATCCAGTTCTAGCAGCAATCTTTCACTTGGTAAGGTTAGGCCGAGCAGTGATCTCAACAAGGTAC  
 TGGCCAGTCTCCTCACCACAAAGTGCAGAGAAGTGTTCCTTCAAGCCAAAAGCAAAGACGCTACAGTGAC  
 CATGCTGGACCAGCTATTCCTTCTGTTGTGGCGTATCCGAAAAGGAGTCAGACCAGCACTGCAGATAGTG  
 ACCTCAAAGAAGATGGAATTTCTCCCGGAAATCAAGTGGCAGTGTGTTGGAGGAAAGGGAATTGCTCC  
 AGCCAGTCCCATGCTTGGGAATGCAAGTAATCCTAATAAGGCGGATATTCCTGAACGCAAGAAAAGCTCC  
 ACTGTCCCTAGTAGTAACACAGCATCTGGTGGAAATGACACGACGAAATACTTATGTTGCAAGTGAAGAA  
 CTACAGCTGATAGACACTCAGTGATTGAGAATGGCAAAGAAAACAGCACTATTCTGATCAGAGAATCC  
 AGTTGCTTCAACACACAGTATCAGTAGTGCAGCCACCCAGATCGAATCCGCTTCCCAAGAGGCACTGCC  
 AGTCGTAGCACTTCCACGGCCAGCCCCGGGAACGGCGAACCGCAACATATAATGGCCCTCTGCCTCTC  
 CCAGCCTGTCCCATGAAGCCACACCATTGTCCCAGACTCGAAGCCGAGGCTCCACTAATCTTTAGTAA  
 ATTAACCTCAAAAACCTACAAGGAGTCGCAATGTATCTGCTGAGCAAAAAGATGAAAAAAGAAAGCAAAG  
 CCTCGATCCCTACGCTTACCTGGAGCATGAAAACCACTAGTTCAATGGATCCCGGGGACATGATGCGGG  
 AAATCCGCAAAGTGTGGACGCAATAACTGCGACTATGAGCAGAGGGAGCGCTTCTTGCTTTCTGCGT  
 CCACGGAGATGGGCACGCGGAGAACCTCGTGCAGTGGGAAATGGAAGTGTGCAAGCTGCCAAGACTGTCT  
 CTGAACGGGTCCGGTTAAGCGGATATCGGGGACATCCATAGCCTTCAAAAATATTGCTTCAAAAATTG  
 CCAATGAGCTAAAGCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG205758 representing NM\_002376  
Red=Cloning site Green=Tags(s)

```
MSTRTP LPTVNERDTENHTSHGDGRQEVTSRTSRSGARCRNSIASCADQPHIGNYRLLKTI GKNFAKV
KLARHILTGREVAIKIIDKTQLNPTSLQKLFREVRIMKILNHPNIVKLFVIEETEKTLYLIMEYASGGEV
FDYLV AHGRMKEKEARSKFRQIVSAVQYCHQKRIVHRDLKAENLLLDADMNIKIADFGFSNEFTVGGKLD
TFCGSPPYAAPEL FQGKKYDGPEDVWVSLGVILYTLVSGSLPFDGQNLKELRERVLRGKYRIPFYMSTDC
ENLLKRFLV LNP I KRGTL EQIMKDRWINAGHEEDELKPFVEPELDI SDQKRIDIMVGMGYSQEEIQESLS
KMKYDEITATY LLLGRKSSELDASDSSSSNL SLAKVRPSSDLN NSTGQSPH HKVQRSVSSSQKRRYS D
HAGPAIPSVVAYPKRSQTSTADSDLKEDGISSRKSSGSAVGGKIAPASPLGNASNPNKADIPERKKSS
TVPSSNTASGGMTRRNTYVCSERTTADRHSVIQNGKENSTIPDQRTPVASTHSISSAATPDRIRFPRGTA
SRSTFHGQPRERTATYNGPPASPSLSHEATPLSQTRSRGSTNLF SKL TSKL TRSRNVSAEQKDENKEAK
PRSLRFTWSMKTTSMDPGDMMREIRKVL DANNCDYEQRERFLLCVHGDGHAENLVQWEMEVCKLPRLS
LNGVRFKRISGTSIAFKNIASKIANELKL
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002376

**ORF Size:** 2187 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\\_002376.6](#)

**RefSeq Size:** 3404 bp

**RefSeq ORF:** 2190 bp

**Locus ID:** 4140

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

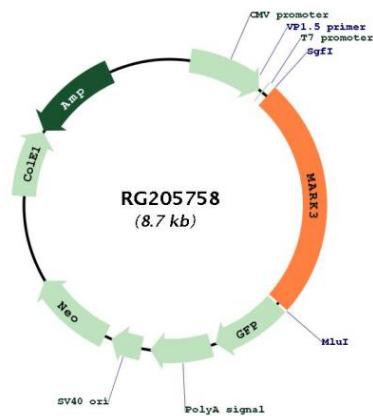
**Cytogenetics:** 14q32.32-q32.33

**Domains:** UBA, pkinase, TyrKc, KA1, S\_TKc

**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 RG205758