

## Product datasheet for **RG239400**

### TLK2 (NM\_001284363) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TLK2 (NM_001284363) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TLK2
Synonyms:	HsHPK; MRD57; PKU-ALPHA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG239400 representing NM\_001284363.  
Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGATGGAAGAATTGCATAGCCTGGACCCACGACGGCAGGAATTATTGGAGGCCAGGTTTACTGGAGTA
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TATGAAACTAGCCAAGGGAAAGGCACTCTAGGGGACATAAAAATTAGTGATTACTTTGAGCGACGAGTA
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ACCCTCATGTGAGTGTGCTAGCAAAACCTCGGCTTGACACAGAGCAGCTGGCGCAAAGGGGAGCTGGC
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GCTACTGAAGTGCAGTTCCTCCGCAAAAGCCAGTAGTAACACCTGAAGCAAAGGCGTTTATTCGACGATGC
TTGGCCTACCGAAAGGAGGACCGCATTGATGTCCAGCAGCTGGCCTGTGATCCCTACTTGTTCCTCAC
ATCCGAAAGTCAGTCTCTACAAGTAGCCCTGCTGGAGCTGCTATTGCATCAACCTCTGGGGCGTCCAAT
AACAGTTCTTCTAAT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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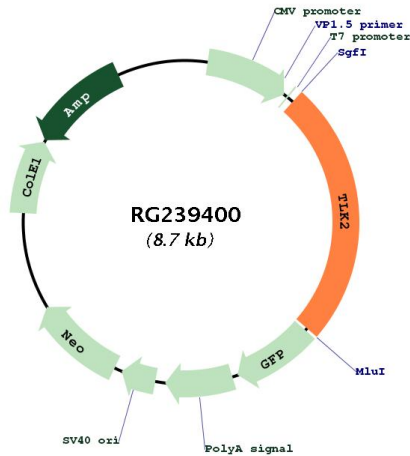
**Protein Sequence:** >Peptide sequence encoded by RG239400  
 Blue=ORF Red=Cloning site Green=Tag(s)

MMEELHSLDPRRQELLEARFTGVGVSKGPLNSESSNQSLCSVGSLSDKEVETPEKKQNDQRNRKRKAEP  
 YETSQGGKTPRGHKISDYFERRVEQPL YGLDGSAAKEATEEQSALPTLMSVMLAKPRLDTEQLAQRGAG  
 LCFTFVSAQQNSPSTGSGNTEHSCSSQKQISIQHRQTQSDLTIEKISALENSKNSDLEKKEGRIDDLL  
 RANCDLRRQIDEQQKMLEKYKERLNRCVTMSKLLIEKSKQEKMACRDKSMQDRLRLGHFTTVRHGASF  
 TEQWTDGYAFQNLIKQQERINSQREEIERQRKMLAKRPPAMGQAPPATNEQKQRKSKTNGAENETLTL  
 AEYHEQEEIFKLRLGHLKKEAEIQAELERLERVRNLHIRELKRINHEDNSQFKDHPTLNDRYLLHL  
 GRGGFSEVYKAFDLTEQRYVAVKIHQLNKNRDEKKNYHKHACREYRIHKELDHPRIVKLYDYFSLDT  
 DSFCTVLEYCEGNLDFYKQHKLMSEKEARSIIMQIVNALKYLNEIKPPIIHVDLKPNGILLVNGTAC  
 GEIKITDFGLSKIMDDSYNSVDGMELTSQGAGTYWYLPPECFVVGKEPKISNKVDVWSVGVIFYQCL  
 YGRKPFQHNQSQDILQENTILKATEVQFPKPVVTPAKAFIRRCCLAYRKEDRIDVQQLACDPYLLPH  
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 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
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 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSDHMHFKSAIHPISILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001284363

**ORF Size:** 2154 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\\_001284363.1](#), [NP\\_001271292.1](#)

**RefSeq Size:** 5113 bp

**RefSeq ORF:** 2157 bp

**Locus ID:** 11011

**UniProt ID:** [Q86UE8](#)

**Cytogenetics:** 17q23.2

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

**MW:** 82.8 kDa

**Gene Summary:**

This gene encodes a nuclear serine/threonine kinase that was first identified in Arabidopsis. The encoded protein is thought to function in the regulation of chromatin assembly in the S phase of the cell cycle by regulating the levels of a histone H3/H4 chaperone. This protein is associated with double-strand break repair of DNA damage caused by radiation. Pseudogenes of this gene are present on chromosomes 10 and 17. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013]