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Product datasheet for RG203352

PLK3 (NM_004073) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLK3 (NM_004073) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLK3
Synonyms:	CNK; FNK; PLK-3; PRK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG203352 representing NM_004073
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCTGCCGCCGGTTTCCTGTCTCCGCGCCCCTTCCAGCGTGCGGCCGCCGCGCCCGCTCCCCCGG
CCGGGCCCGGGCCGCCTCCGAGTGCCTTGCGCGGACCTGAGCTGGAGATGCTGGCCGGGCTACCGACGTC
AGACCCCGGGCGCCTCATCACGGACCCGCGCAGCGGCCGCACCTACCTCAAAGGCCGCTTGTTGGGCAAG
GGGGGCTTCGCCCGCTGCTACGAGGCCACTGACACAGAGACTGGCAGCGCCTACGCTGTCAAAGTCATCC
CGCAGAGCCGCGTCGCCAAGCCGCATCAGCGCGAGAAGATCCTAAATGAGATTGAGCTGCACCGAGACCT
GCAGCACCGCCACATCGTGCGTTTTTCGCACCACTTTGAGGACGCTGACAACATCTACATTTTCTTGGAG
CTCTGCAGCCGAAAGTCCCTGGCCCACATCTGGAAGGCCCGGCACACCCTGTTGGAGCCAGAAGTGCGCT
ACTACCTGCGGCAGATCCTTTCTGGCCTCAAGTACTTGCACCAGCGCGGCATCTTGCACCGGGACCTCAA
GTTGGGAAATTTTTTCATCACTGAGAACATGGAACTGAAGGTGGGGGATTTTGGGCTGGCAGCCCGGTTG
GAGCCTCCGGAGCAGAGGAAGAAGACCATCTGTGGCACCCCCAACTATGTGGCTCCAGAAGTGCTGCTGA
GACAGGGCCACGGCCCTGAGGCGGATGTATGGTCACTGGGCTGTGTCATGTACACGCTGCTCTGCGGGAG
CCCTCCCTTTGAGACGGCTGACCTGAAGGAGACGTACCGCTGCATCAAGCAGGTTCACTACACGCTGCCT
GCCAGCCTCTCACTGCCTGCCCGGCAGCTCCTGGCCGCCATCCTTCGGGCCTCACCCCGAGACCGCCCCT
CTATTGACCAGATCCTGCGCCATGACTTCTTTACCAAGGGCTACACCCCCGATCGACTCCCTATCAGCAG
CTGCGTGACAGTCCCAGACCTGACACCCCCCAACCCAGCTAGGAGTCTGTTTGCCAAAGTTACCAAGAGC
CTCTTTGGCAGAAAGAAGAAGAGTAAGAATCATGCCCAGGAGAGGGATGAGGTCTCCGGTTTGGTGAGCG
GCCTCATGCGCACATCCGTTGGCCATCAGGATGCCAGGCCAGAGGCTCCAGCAGCTTCTGGCCCAGCCCC
TGTCAGCCTGGTAGAGACAGCACCTGAAGACAGCTCACCCCGTGGGACACTGGCAAGCAGTGGAGATGGA
TTTGAAGAAGGTCTGACTGTGGCCACAGTAGTGGAGTCAGCCCTTTGTGCTCTGAGAAATTGTATAGCCT
TCATGCCCCCAGCGGAACAGAACCCGGCCCCCCTGGCCCAGCCAGAGCCTCTGGTGTGGGTCAGCAAGTG
GGTTGACTACTCCAATAAGTTCGGCTTTGGGTATCAACTGTCCAGCCGCCGTGTGGCTGTGCTCTTCAAC
AATGGCACACATATGGCCCTGTCGGCCAACAGAAAGACTGTGCACTACAATCCCACCAGCACAAAGCACT
TCTCCTTCTCCGTGGGTGCTGTGCCCCGGGCCCTGCAGCCTCAGCTGGGTATCCTGCGGTACTTCGCCTC
CTACATGGAGCAGCACCTCATGAAGGGTGGAGATCTGCCCAGTGTGGAAGAGGTAGAGGTACCTGCTCCG
CCCTTGCTGCTGCAGTGGGTCAAGACGGATCAGGCTCTCCTCATGCTGTTTAGTGATGGCACTGTCCAGG
TGAACTTCTACGGGGACCACACCAAGCTGATTCTCAGTGGCTGGGAGCCCCTCCTTGTGACTTTTGTGGC
CCGAAATCGTAGTGCTTGTACTTACCTCGCTTCCCACCTTCGGCAGCTGGGCTGCTCTCCAGACCTGCGG
CAGCGACTCCGCTATGCTCTGCGCCTGCTCCGGGACCGCAGCCCAGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

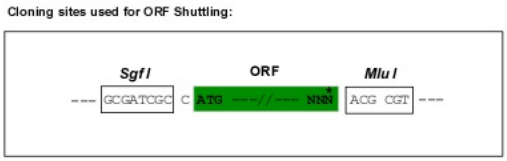
>RG203352 representing NM_004073
Red=Cloning site Green=Tags(s)

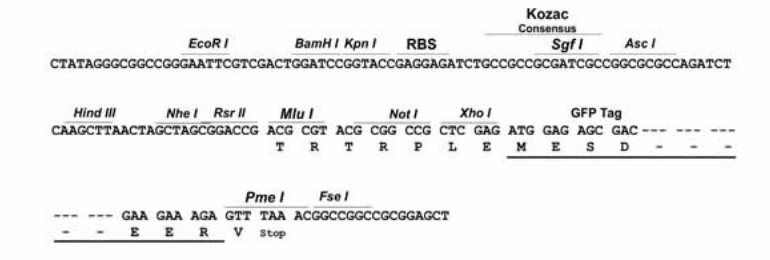
MEPAAGFLSPRPFQRAAAAPAPPAGPGPPPSALRGPELEMLAGLPTSDPGRLITDPRSGRTYLKGRLLGK
GGFARCYEATDTETGSAYAVKVIPQSRVAKPHQREKILNEIELHRDLQHRHIVRFSHHFEDADNIYIFLE
LCSRKSLAHIWKARHTLLEPEVRYYLRQILSGLKYLHQRGILHRDLKLGNFFITENMELKVGDFGLAARL
EPPEQRKKTICGTPNYVAPEVLLRQGHGPEADVWSLGCVMYTLLCGSPPFETADLKETYRCIKQVHYTLP
ASLSLPARQLLAAILRASPRDRPSIDQILRHDFFTKGYTPDRLPISSCVTVPDLTPPNPARSLFAKVTKS
LFGRKKKSKNHAQERDEVSGLVSGLMRTSVGHQDARPEAPAASGPAPVSLVETAPEDSSPRGTLASSGDG
FEEGLTVATVVESALCALRNCIAFMPPAEQNPAPLAQPEPLVWVSKWVDYSNKFGFGYQLSSRRVAVLFN
NGTHMALSANRKTVHYNPTSTKHFSFSVGAVPRALQPQLGILRYFASYMEQHLMKGGDLPSVEEVEVPAP
PLLLQWVKTDQALLMLFSDGTVQVNFYGDHTKLILSGWEPLLVTFVARNRSACTYLASHLRQLGCSPDLR
QRLRYALRLLRDRSPA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:





ACCN: NM_004073

ORF Size: 1938 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

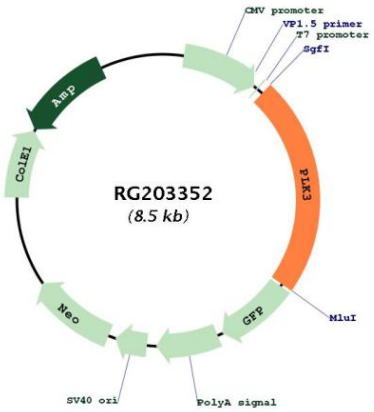
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_004073.2, NP_004064.2
RefSeq Size:	2369 bp
RefSeq ORF:	1941 bp
Locus ID:	1263
UniProt ID:	Q9H4B4
Cytogenetics:	1p34.1
Domains:	pkinase, POLO_box, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	The protein encoded by this gene is a member of the highly conserved polo-like kinase family of serine/threonine kinases. Members of this family are characterized by an amino-terminal kinase domain and a carboxy-terminal bipartite polo box domain that functions as a substrate-binding motif and a cellular localization signal. Polo-like kinases are important regulators of cell cycle progression. This gene has also been implicated in stress responses and double-strand break repair. In human cell lines, this protein is reported to associate with centrosomes in a microtubule-dependent manner, and during mitosis, the protein becomes localized to the mitotic apparatus. Expression of a kinase-defective mutant results in abnormal cell morphology caused by changes in microtubule dynamics and mitotic arrest followed by apoptosis. [provided by RefSeq, Sep 2015]

Product images:



Circular map for RG203352