

Product datasheet for **RG206015**

PLK4 (NM_014264) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLK4 (NM_014264) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLK4
Synonyms:	MCCRP2; SAK; STK18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG206015 representing NM_014264
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGACCTGCATCGGGGAGAAGATCGAGGATTTTAAAGTTGGAATCTGCTTGGTAAAGGATCATTTG
 CTGGTGTCTACAGAGCTGAGTCCATTCACTGGTTTGAAGTTGCAATCAAATGATAGATAAGAAAGC
 CATGTACAAAGCAGGAATGGTACAGAGAGTCCAAATGAGGTGAAAATACATTGCCAATTGAAACATCCT
 TCTATCTTGGAGCTTTATAACTATTTTGAAGATAGCAATTATGTGTATCTGGTATTAGAAATGTGCCATA
 ATGGAGAAATGAACAGGTATCTAAAGAATAGAGTGAAACCCTTCTCAGAAAATGAAGCTCGACACTTCAT
 GCACCAGATCATCACAGGGATGTTGTATCTTCATTCTCATGGTATACTACACCGGACCTCACACTTTCT
 AACCTCTACTGACTCGTAATATGAACATCAAGATTGCTGATTTTGGGCTGGCAACTCAACTGAAAATGC
 CACATGAAAAGCACTATACATTATGTGGAACCTAACTACATTTACCAGAAAATGCCACTCGAAGTGC
 ACATGGCCTTGAATCTGATGTTTGGTCCCTGGGCTGTATGTTTTATACATTACTATCGGGAGACCACC
 TTGCACACTGACACAGTCAAGAACACATTAATAAAGTAGTATTGGCAGATTATGAAATGCCATCTTTTT
 TGTC AATAGAGGCCAAGGACCTTATTCACCAGTACTTCGTAGAAATCCAGCAGATCGTTTAAAGTCTGTC
 TTCAGTATTGGACCATCCTTTTTATGTCCCGAAATCTTCAACAAAAAGTAAAGATTTAGGAACTGTGGAA
 GACTCAATTGATAGTGGGCATGCCACAATTTCTACTGCAATTACAGCTTCTTCCAGTACCAGTATAAGTG
 GTAGTTTATTTGACAAAAGAAGACTTTTGTATTGGTCAGCCACTCCCAAATAAAATGACTGTATTTCCAAA
 GAATAAAAGTTCAACTGATTTTTCTTCTCAGGAGATGGAACAGTTTTTATACTCAGTGGGGAAATCAA
 GAAACCAGTAATAGTGAAGGGGAAGAGTAATTC AAGATGCAGAAGAAAGGCCACATTCTCGATACCTTC
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 ACGATGTCACTCAGCAGAAATGCTTTTCAGTGTCCAAAAGATCAGGAGGAGGTGAAAATGAAGAGAGGTAC
 TCACCACAGACAACAATGCCAACATTTTTA ACTTCTTTAAAGAAAAGACATCCAGTAGTTCTGGATCTT
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 CATCAAAAATGCCTGGACTGATACAAAAGTCAAAAAGA ACTCTGATGCTTCTGATAATGCACATTCTGT
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 GTTTTTGGCTCAGATCCTCTTTCTGAACAGAGCAAGACTAGGGGTATGGAGCCACCATGGGTTATCAGA
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 CAACTACAGCTTCTGGAACAGACATCTCTTCTAATAGTCTAAAAGATTGTCTTCTAAATCAGCACA ACT
 TTTGAAATCTGTTTTGTGAAAATGTTGGTGGGCTACACAGTTAACTAGTGGAGCTGTGTGGGTT CAG
 TTTAATGATGGGTC CAGTTGGTTGTGCAGGCAGGAGTGTCTTCTATCAGTTATACCTCACCAAATGGTC
 AAACA ACTAGGTATGGAGAAAATGAAAATACCAGACTACATCAAACAGAAATTACAGTGTCTGTCTTC
 CATCCTTTTGATGTTTTCTAATCCGACTCCTAATTTTCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206015 representing NM_014264
 Red=Cloning site Green=Tags(s)

MATCIGEKIEDFKVGNLLGKGSFAGVYRAESIHTGLEVAIKMIDKKAMYKAGMVQRVQNEVKIHCQLKHP
 SILELYNYFEDSNYYVLVLEMCHNGEMNRYLKNRVKPFSENEARHFHQIITGMLYLHSHGILHRDLTSL
 NLLLTRNMNIKIADFLATQLKMPHEKHHTLCTGTPNYISPEIATRSAGHLESDVWSLGCMFYTLIGRPP
 FDTDTVKNTLNKVVVLADYEMPSFLSIEAKDLIHQLLRNPADRLSLSSVLDHPPFMSRNSSTKSKDLGTVE
 DSIDSGHATISTAITASSSTSISGSLFDKRRLLIGQPLPNKMTVFPKNKSSSTDFSSSGDGNFYTQWGNQ
 ETSNSGRGRVIQDAEERPHSRYLRRAYSDDRSRGTNSQSQAQKTYMERCBSAEMLSVSKRSGGGENEERY
 SPTDNNANIFNFKEKTSSSSGSFERPDNNQALSNHLCPGKTPFPFADPTPQTETVQQWFGNLQINAHLR
 KTTEYDSISPNRDFQGHFDLQKDTSKNAWTDTKVKNSDASDNAHSVKQNTMKYMTALHSKPEIIQQEC
 VFGSDPLSEQSKTRGMEPPWGYQNRRLRSITSPLVAHRLKPIRQKTKKAVVSILDSEEVVELVKEYASQ
 EYVKEVLQISSDNTITIIYPNGGRGFPLADRPSPDNI SRYSFDNLPEKYWRKYQYASRFVQLVRSKS
 PKITYFTRYAKCILMENSFGADFEVWFYDGVKIHKTEDFIQVIEKTKGKSYTLKSESEVNSLKEEIKMYMD
 HANEGHRICLALESIIEEERKTRSAFPFPIIIGRKPSTSSPKALSPPPSVDSNYPTRERASFNRMMVH
 SAASPTQAPILNPSMVTNEGLGLTTASGTDISSNSLKDCLPKSAQLLKS VYFVKNVGVATQLTSGAVVWQ
 FNDGSQLVVQAGVSSISYTPNGQTTRYGENEKLDPYIKQLQLSSILLMFSNPTPNFH

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

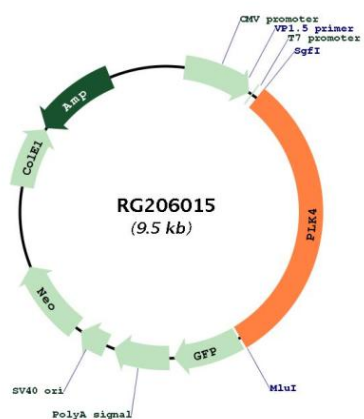


ACCN: NM_014264

ORF Size: 2910 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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_014264.5
RefSeq Size:	3331 bp
RefSeq ORF:	2913 bp
Locus ID:	10733
UniProt ID:	O00444
Cytogenetics:	4q28.1
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>This gene encodes a member of the polo family of serine/threonine protein kinases. The protein localizes to centrioles, complex microtubule-based structures found in centrosomes, and regulates centriole duplication during the cell cycle. Three alternatively spliced transcript variants that encode different protein isoforms have been found for this gene. [provided by RefSeq, Jun 2010]</p>

Product images:



Circular map for RG206015