

Product datasheet for **SC323369**

PLK4 (NM_014264) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLK4 (NM_014264) Human Untagged Clone
Tag:	Tag Free
Symbol:	PLK4
Synonyms:	MCCRP2; SAK; STK18
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323369 sequence for NM_014264 edited (data generated by NextGen Sequencing)

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ATGGCGACCTGCATCGGGGAGAAGATCGAGGATTTTAAAGTTGGAATCTGCTTGGTAA
GGATCATTGCTGGTGTCTACAGAGCTGAGTCCATTCACACTGGTTTGGAAAGTTGCAATC
ANNATGATAGATAAGAAAAGCCATGTACAAGCAGGAATGGTACAGAGAGTCCAAAATGAG
GTGAAAATACATTGCCAATTGAAACATCCTTCTATCTTGGAGCTTTATAACTATTTTGA
GATAGCAATTATGTGTATCTGGTATTAGAAATGTGCCATAATGGAGAAATGAACAGGTAT
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AACCTCCTACTGACTCGTAATATGAACATCAAGATTGCTGATTTTGGGCTGGCAACTCAA
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TTTTATACATTACTTATCGGGAGACCACCTTCGACACTGACACAGTCAAGAACACATTA
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AGATCTGGCACTTCTAATAGTCAGTCTCAAGCAAAAACATATACAATGGAACGATGTCAC
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TCACCCACAGACAACAATGCCAACATTTTTAACTTCTTTAAAGAAAAGACATCCAGTAGT
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AAAACCTCTTTTCCATTTGCAGACCCGACACCTCAGACTGAAACCGTACAACAGTGGTTT
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AACCGGGACTTCCAGGGCCATCCAGATTTGCAGAAGGACACATCAAAAAATGCCTGGACT
GATACAAAAGTCAAAAAGAACTCTGATGCTTCTGATAATGCACATTCTGTAAAACAGCAA
AATACCATGAAATATATGACTGCACTTCACAGTAAACCTGAGATAATCCAACAAGAAATGT
GTTTTTGGCTCAGATCCTCTTTCTGAACAGAGCAAGACTAGGGGTATGGAGCCACCATGG
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CAGTTAACTAGTGGAGCTGTGTGGGTTCAAGTTAATGATGGGTCCAGTTGGTTGTGCAG
GCAGGAGTGTCTCTATCAGTTATACCTCACCAATGGTCAACAACACTAGGTATGGAGAA
AATGAAAAATTACCAGACTACATCAAACAGAAATTACAGTGTCTGTCTTCCATCCTTTTG
ATGTTTTCTAATCCGACTCCTAATTTTTCATTGA
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Clone variation with respect to NM_014264.4
122 a=>n;123 a=>n

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_014264 unedited
CCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGTGAAC
CGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGAGATTTTCAAAATGG
GAGCCCAGAGGCACCGCCAGGCCTCGGAAGGTGTCAGGGAGAATTTCCGTGGTTTCAGCGTCGTCGCC
TGGAGCGGCGGTTTAGAGAGCCGAGCCTGATGGGCGCAAGGCCGGCTGGCTGCTTGGAGCACTGCCTCG
AAGGGACTGCGTGAAGGAAGCTAATCCGGAGAAACCCAGGCCAGAGCCCTGGAAATATGGGGACCTGCA
TCGGGGAGAAAGATCGAGGATTTTAAAGTTGAAATCTGCTTGGGTAAAGGATCATTTGCTGGTGGTCTAC
GGAGCTGAGTCCCATTAGACGGGTTGGGAGGTGCAATCATGATGGATGGATAAGAAGGCATGAAAAAGC
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TTTAACATTTTTGAAAATGGCATATGTGTGACTGGGTTTAAAGTGGCCAAGGAAAGGACCGGTTCTAG
AATAGGGACCCCTTCCAAATGAACCGCCTTACGCCATATCCCGGAGTGTGATCATTCTAGGGTTACACCG
GACCTCACATTAACCCATAGCTGAATGACACACAAATGGATTGTGCACTCTGAATGCCTGAGAGCAACTA
TTGAAACTGACTTCCGAATGCCATGACTGCTCACGGTGGGCCGCTGCTAACATCGGAACCTGATAGAAAA
AAAA

Kinase Domain Sequence:

>SC323369 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation
CSACKMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGTGAACCGT
CAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGAGATTTTCAAAATGGGAG
CCCAGAGGCACCGCCAGGCCTCGGAAGGTGTCAGGGAGAATTTCCGTGGTTTCAGCGTCGTCGCCCTGG
AGCGGCGGTTTAGAGAGCCGAGCCTGATGGGCGCAAGGCCGGCT

Restriction Sites:

Please inquire

ACCN:

NM_014264

Insert Size:	3970 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <u>Cell</u> . 2008 May p536-548.
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:	<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:	<u>NM_014264.2</u> , <u>NP_055079.2</u>
RefSeq Size:	3331 bp
RefSeq ORF:	2913 bp
Locus ID:	10733
UniProt ID:	<u>O00444</u>
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> <p>Transcript Variant: This variant (1) represents the longest transcript and it encodes the longest protein (isoform 1).</p>