

Product datasheet for **MR231346**

Plk4 (NM_173169) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plk4 (NM_173169) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plk4
Synonyms:	1700028H20; AI385771; S; Sak; Stk1; Stk18
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>MR231346 representing NM_173169
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGCGCGTGCATCGGGGAGAGGATCGAGGACTTTAAGTTGGAATCTACTCGGTAAGGATCATTTG
CTGGTGTCTACAGAGCTGAGTCCATACACACTGGTTTGAAGTTGCAATCAAAATGATAGATAAGAAAGC
CATGTACAAAGCTGGAATGGTACAGAGAGTCCAAAATGAGGTGAAAATACATTGCCAGTTGAAACACCCC
TCTGTCTTGGAGCTCTATAATTACTTTGAAGATAACAATTATGTCTACCTGGTATTGAAAATGTGCCACA
ATGGAGAAATGAACAGATATCTGAAGAACAAGATGAAGCCTTTCTCAGAAAAGGGAAGCTAGGCACCTCAT
GCACCAGATTATCACAGGAATGTTATATCTTCATTCTCATGGCATATTGCACCGGACCTCACACTCTCT
AACATCTTACTTACGCGGAATATGAACATAAAAATTGCTGACTTTGGACTAGCAACGCAGTTGAATATGC
CACATGAAAAGCACTATACACTCTGTGGGACTCCTAATTATATTTACCAGAAAATGCAACTCGAAGTGC
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TTTGACACTGACACAGTCAAGAACAATTGAACAAAGTAGTCCTGGCAGATTATGAAATGCCAGCCTTTT
TGTCACGAGAGGCCAGGACCTTATCCACCAGTACTTCGTAGAAAACCTGCAGATCGGTTAAGTCTGTC
TTCTGTGTTGGACCATCCTTTTCATGTCACGAAATCCTTCACCAAAGAGTAAAGACGTAGGGACTGTAGAG
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GGAGTCGACACTGGGTTACCAGAAAACCTACCTAAGAAGTATTACATCTCCTCTGATTGCTCACAGATTA
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CAGCTTTGACAATCTACCAGAAAATACTGGCGGAAAATATCAGTATGCTTCCAGATTCATTACAGCTAGTA
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TCTGATGTTTTCTAATCCAACCTCAATTTTCAG

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231346 representing NM_173169
 Red=Cloning site Green=Tags(s)

MAACIGERIEDFKVGNLLGKGSFAGVYRAESIHTGLEVAIKMIDKKAMYKAGMVQRVQNEVKIHCQLKHP
 SVLELYNYFEDNNYVYL VLEMCHNGEMNRYLKNRMKPF SEREARHFHQIITGMLYLHSHGILHRDLTSL
 NILLTRNMNIKIADFLATQLNMPHEKHHTLCGTPNYISPEIATRSAGHLESDIWSLGCMFYTLIGRPP
 FDTDVTKNTLNKVVLDYEMPAFLSREAQDLIHQLLRNPADRLSSVLDHHPMSRNPSPKSKDVGTVE
 DSMDSGHATLSTTITASSGSLSGSLLDRRLLVGQPLPNKITVFQKNKNSDFSSGDGSNFCTQWGNPEQ
 EANSRGRGRVIEDAERPHSRYLRRAHSSDRASPNQSRAKTYSVERCHSVEMLSKPRRSLDENQHSSNH
 HCLGKTPFPFADQTPQMEMVQQWFGNLQMNHLGETNEHHTVSPNRDFQDYPDLQDTRLNAWTDTRASKN
 ADTSANVHAVKQLSAMKYSAHHHKPEVMPQEPGLHPHSEQSKNRSMESTLGYQKPTLRSITSPLIAHRL
 KPIRQKTKKAVVSILDSEEITVYYPNDGRGFPLADRPPLPTDNISRYSDNLPEKYWRKYQYASRFIQLV
 RSKTPKITYFTRYAKCILMENSFGADFEVWFYDGAKIHKTENLIHIEKGTISYLNKNENEVTSLKEEVK
 VYMDHANEGHRICLSLESVISEEEKSRGSSFFPIIVGRKPGNTSSPKALSAPPVDPSCCKGEQASARL
 SVNSAAFPTQSPGLSPSTVTVEGLGHTATATGTGVSSSLPKSAQLLKSVMKNGVATQLTSGAVVWQFN
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

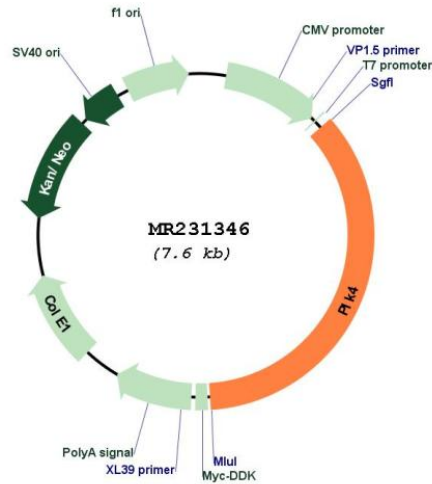
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_173169

ORF Size: 2694 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_173169.2](#), [NP_775261.2](#)

RefSeq Size: 3486 bp

RefSeq ORF: 2697 bp

Locus ID: 20873

UniProt ID: [Q64702](#)

Cytogenetics: 3 B

MW: 101.3 kDa

Gene Summary: This gene encodes a member of the polo family of serine/threonine protein kinases. The protein localizes to the nucleolus during G₂, to centrosomes during G₂/M, and to the cleavage furrow during cytokinesis. It is required for progression through mitosis, cell survival, and embryonic development. The mouse genome contains a pseudogene similar to this gene. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]