

Product datasheet for **MR211205**

Plk4 (NM_011495) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plk4 (NM_011495) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plk4
Synonyms:	1700028H20; AI385771; S; Sak; Stk1; Stk18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR211205 representing NM_011495
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGCGTGCATCGGGGAGAGGATCGAGGACTTTAAGTTGGAATCTACTCGGTAAGGATCATTTG
 CTGGTGTCTACAGAGCTGAGTCCATACACACTGGTTTGAAGTTGCAATCAAATGATAGATAAGAAAGC
 CATGTACAAAGCTGGAATGGTACAGAGAGTCCAAAATGAGGTGAAAATACATTGCCAGTTGAAACACCCC
 TCTGTCTTGGAGCTCTATAATTACTTTGAAGATAACAATTATGTCTACCTGGTATTGAAAATGTGCCACA
 ATGGAGAAATGAACAGATATCTGAAGAACAAGATGAAGCCTTTCTCAGAAAAGGGAAGCTAGGCACCTCAT
 GCACCAGATTATCACAGGAATGTTATATCTTCATTCTCATGGCATATTGCACCGGACCTCACACTCTCT
 AACATCTTACTTACGCGGAATATGAACATAAAAAATTGCTGACTTTGGACTAGCAACGCAGTTGAATATGC
 CACATGAAAAGCACTATACACTCTGTGGGACTCCTAATTATATTTACCAGAAAATGCAACTCGAAGTGC
 ACATGGACTTGAATCTGATATTTGGTCATTGGGCTGTATGTTTTATACGTTACTTATTGGAAGACCCT
 TTTGACACTGACACAGTCAAGAACAATTGAACAAAGTAGTCCTGGCAGATTATGAAATGCCAGCCTTTT
 TGTCCAGAGAGGCCAGGACCTTATCCACCAGTACTTCGTAGAAAACCTGCAGATCGGTTAAGTCTGTC
 TTCTGTGTTGGACCATCCTTTTCATGTCACGAAATCCTTCACCAAAGAGTAAAGACGTAGGGACTGTAGAG
 GACTCAATGGATAGTGGGCATGTACACTTTCCACAACAATTACAGCCTCTTCTGGTACCAGTTTGGAGT
 GCAGCCTACTTGACAGAAGACTTTTGGTTGGTCAACCCTTCAAATAAAATTAAGTATTTCAAAAAA
 TAAAAATCAAGTGACTTTTCTCAGGAGATGGAAGTAATTTTGTACTCAATGGGAAAATCCAGAACAA
 GAAGCTAATAGTAGGGGACGGGGAGAGTGATTGAAGATGCAGAAGAGAGGCCGATTCTCGATACCTGC
 GCAGAGCTATTCTCTGATAGAGCCAGCCCTTAATCAGTCTCGAGCAAAAACATACTCAGTAGAACG
 TTGTCACTCAGTAGAAAATGCTTTCAAAGCCTAGAAGATCACTGGATGAAAATCAACACAGTTCCAATCAT
 CATTGTCTAGGAAAACTCCTTTCCATTTGCAGACCAGACACCTCAGATGGAAATGGTACAGCAGTGGT
 TTGGGAATCTGCAATGAATGCTCATTTAGGAGAACTAATGAGCACCACACCGTTAGCCAAAACAGAGA
 TTTCCAGGACTATCCAGATTTGCAGGACACGTTACGAAACGCTTGGACTGACACGAGAGCCAGCAAGAA
 TTTGATACTTCTGCCAATGTTTCATGCTGTAAGCAGCTGAGTGCCATGAAATACATGAGTGCACATCACC
 ATAAGCCTGAGGTCATGCCACAGGAGCCGGCCTACATCCTCATTCTGAACAAAGCAAGAATAGAAGTAT
 GGAGTCGACACTGGGTTACCAGAAACCTACCTAAGAAGTATTACATCTCCTCTGATTGCTCACAGATTA
 AAGCCAATCAGACAGAAAACAAAAAGGCTGTGGTGTGAGCATCCTTGATTCAGAGGAGGTGTGTGGAGC
 TTCTGAGAGAGTGTGCGTCTGAAGGATATGTGAAAGAAGTCTTACAGATATCGAGTGTGGGACTATGAT
 CACTGTTTATTACCCGAACGATGGAAGAGGCTTTCCTCTTGTGACAGACCTCCCTTGCCTACTGACAAC
 ATCAGTAGGTACAGCTTTGACAATCTACCAGAAAAATACTGGCGGAAATATCAGTATGCTCCAGATTCA
 TTCAGCTAGTAAGATCTAAAACCTCCAAAATCACTTATTTTACAAGATATGCTAAATGTATTTTGTGGA
 AAATCTCCTGGTGTGATTTTGAAGTTTGGTTTTATGATGGAGCCAAAATACATAAAACTGAAAATTTA
 ATTCACATAATTGAGAAAACAGGGATATCTTATAATTTAAAAAATGAAAATGAAGTTACCAGCCTGAAAG
 AGGAAGTAAAAGTATATATGGACCATGCTAATGAGGGTCACCGTATTTGCTTGTCACTGGAATCTGTAAT
 CTCTGAGGAGGAAAAGAGAAGCAGGGGTTCTTCTTCCCTATAATCGTAGGAAGAAAACCTGGTAAT
 ACTAGTTCACCTAAAGCCTTATCAGCTCCTCCTGTGGACCAAGCTGCTGTAAAGGAGAGCAGGCGTCAG
 CAAGCAGACTGAGCGTGAATAGTGCCGCTTTCCACACAGTCCCAGGACTCAGTCTTCCACTGTGAC
 AGTTGAAGGACTTGGCCACACAGCGACTGCCACAGGAACAGGCGTCTCTCAAGTCTTCTAAATCTGCA
 CAGCTTTTGAATCTGTTTTTGTGAAAAATGTTGGTTGGGCTACACAGCTAACTAGCGGAGCTGTGTGGG
 TTCAGTTAATGATGGGTCACAGTTGGTTGTCCAGGCAGGAGTATCTCCATCAGTTACACATCACCAGA
 TGGTCAGACAACAGGTATGGAGAAAATGAAAATACCTGAATACATCAAACAGAAATTACAGTGTCTT
 TCTCCATCCTTCTGATGTTTTCTAATCCAACCTCTAATTTTCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >MR211205 representing NM_011495
 Red=Cloning site Green=Tags(s)

MAACIGERIEDFKVGNLLGKGSFAGVYRAESIHTGLEVAIKMIDKKAMYKAGMVQRVQNEVKIHCQLKHP
 SVLELYNYFEDNNYVYL VLEMCHNGEMNRYLKNRMKPF SEREARHFHQIITGMLYLHSHGILHRDLTSL
 NILLTRNMNIKIADFLATQLNMPHEKHHTLCGTPNYISPEIATRSAGHLESDIWSLGCMFYTLIGRPP
 FDTDTVKNTLNKVVVLADYEMPAFLSREAQDLIHQLLRNPADRLSLSSVLDHPFMSRNPSPKSKDVGTV
 DSMDSGHATLSTTITASSGSLSGSLLDRRLLVGQPLPNKITVFQKNKNSDFSSGDGNSFCTQWGNPEQ
 EANSRGRGRVIEDAERPHSRYLRAHSSDRASPNQSRKTYSVRCHSVEMLSKPRRSLDENQHSNH
 HCLGKTPFPFADQTPQMEMVQQWFNLQMAHLGETNEHHTVSPNRDFQDYPDLQDTRLNAWTDTRASKN
 ADTSANVHAVKQLSAMKYMSAHHHKPEVMPQEPGLHPHSEQSKNRSMESTLGYQKPTLRSITSPLIAHRL
 KPIRQKTKKAVVSILDSEEVCELLRECASEGYVKEVLQISSDGMTITVYYPNDGRGFPLADRPPLPTDN
 ISRYSDNLPEKYWRKYQYASRFIQLVRSKTPKITFYTRYAKCILMENSPGADFEVWFYDGAKIHKTENL
 IHIEKTGISYNLKNENEVTSLKKEEVKVMYDHANEGHRICLSLESVISEEEKRSRGSSFFPIIVGRKPGN
 TSSPKALSAPPVDPSCCKGEQASASRLSVNSAAFPTQSPGLSPSTVTVEGLGHTATATGTGVSSSLPKSA
 QLLKSVFVKNVGWATQLTSGAVVWQFNDGSQLVQAGVSSISYTPDGGTTRYGENEKLPEYIKQKLQCL
 SSILLMFSNPTPNFQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9009_d09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_011495

ORF Size: 2775 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_011495.2](#), [NP_035625.2](#)

RefSeq Size: 3567 bp

RefSeq ORF: 2778 bp

Locus ID: 20873

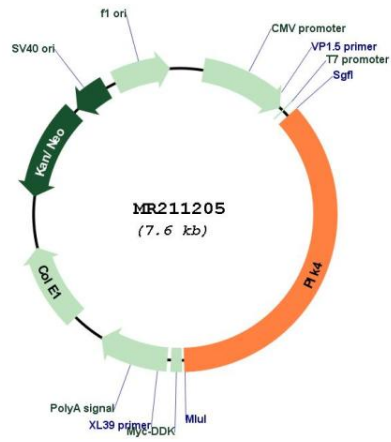
UniProt ID: [Q64702](#)

Cytogenetics: 3 B

MW: 104.2 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]

Product images:



Circular map for MR211205