

## Product datasheet for **MG209747**

### **Plk3 (NM\_013807) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Plk3 (NM_013807) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plk3
Synonyms:	Cn; 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:**

>MG209747 representing NM\_013807  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGCCCGCCCGCGGTTCTTGTCTCCGCGCCCTTCCGCGCGGGTGCCTCCGCGCCCGCC  
 CCGGCCCGGGCCGCTGCCAATGCCTCCCGCGATCGGAACCTGAGGTGCTGGCCGGCCACGGCGCC  
 GGATCCTCCTGGTCGCCTCATCACCGACCTCTCAGCGGCGTACCTACCCAAGGGTCGCTTGTGGG  
 AAGGGGGCTTCGCACGCTGCTATGAAGCCACTGACACCGAGTCTGGTATAGCTACGCGGTCAAAGTCA  
 TCCACAGAGTCGCGTCGCCAAGCCGCATCAGCGCGAGAAGATCTAAATGAGATAGAGTTGCACCGAGA  
 CCTACAGCACCGCCATATCGTTCGCTTTTACATCATTTTCGAGGATGCTGACAACATATACATTTTCTG  
 GAGCTCTGTAGCCGAAAGTCCCTGGCCACATCTGGAAGGCCGACACACCCTGTTGGAACCAGAGGTTT  
 GCTACTACCTGCGCCAGATCCTTTCTGGCCTCAAGTACTTGACCCAGAGGGGTATCTTACACAGAGATCT  
 CAAGCTGGGAAATTTTTTTCATCACGGATAACATGGAACGAAGGTGGGGATTTTGGGCTGCCAGCTCGA  
 TTAGAGCCCCAGAGCAGAGGAAAAAGACCATCTGTGGCACTCCCAACTACGTGGCTCCAGAAGTGTCTGC  
 TGAGACAGGGCCATGGCCCCGAGGCAGATGTGTGGTTCGCTTGGTTGTGTATGTACACGCTCCTGTGTGG  
 GAGCCCCCATTTGAGACTGCTGACCTGAAGGAGACATACCGCTGCATCAAGCAGGTTTATTACACGCTA  
 CCTGCCAGCCTCTCCCTGCCTGCCCGCAGCTCCTGGCTGCCATCCTCCGAGCTTACCCAGAGACCGCC  
 CTTCCATTGAACAGATTTTACGCCATGACTTCTTACGAAGGGTACACCCCTGATCGGCTCCCGGTGAG  
 CAGCTGTGTGACAGTCCCAGATCTGACACCCCAACCCTGCGAGGAGTCTGTTTGCCAAAGTTACCAAG  
 AGCCTGTTTGGCAGGAAAAAGAACAAGAATAAGAACCATTCTGAGGACCAGGATAATGTCTCCTGCTTGG  
 TGAGTGGCCTCATGCGCACATCCATCGGTATCCAGATGTCAGGCCGAGGCTCCTGTAGTTTCAGGCCA  
 GGCCCCGCCAGCTTGGTAGAGACAGCTGCCGAGGACAGCTCGCCCCGTGGGACACTGGCCAGCAGTGGA  
 GATGGGTTTGAAGAAGGTTTACTGTGGCCACAGTGGTAGAGTCTGCCCTCTGTGCACTGAGAACTGTG  
 TGGCCTTCATGCCCCAGCCGAACAGAACCAGCCCCGCTGGCACAGCCAGAGCCTCTGGTGTGGGTGAG  
 CAAGTGGGTTGACTACTCCAACAAGTTTGGCTTGGCTATCAGCTGTCCAGCCGCGGTGAGCCGTGCTC  
 TTCAATGATGGCACACACATGGCCCTGTGAGCCAAATAGGAAGACGGTGCCTACAACCCACCAGCACGA  
 AGCACTTCTCCTTCTCCATGGGTCTGTGCCCGAGCTCTGCAGCCTCAGCTGGGCATCCTGCGGTATTT  
 TGCGTCTACATGGAACAGCACCTCATGAAGGGTGGAGATCTGCCAGTGTGGAAGAGCGGAGGTGCT  
 GCCCACCCCTTGCTGCTGCAAGTGGTCAAGACTGACCAGGCCCTCCTCATGCTGTTCAAGTATGGCACTG  
 TCAGGTGAACCTTACGGGGACCACACGAAGCTGATCCTCAGTGGCTGGGAGCCTCTCCTTGTGACCTT  
 CGTGGCCCCGAATCGCAGTGTCTTACTTACCTCGCTTCCACCTCCGGCAGCTGGGCTGCTCCCCAGAC  
 TTGCGGCAGCGACTGCGCTACGCTCTGCGCCTGCTCAGGGACCAAGCCCTGCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG209747 representing NM\_013807  
 Red=Cloning site Green=Tags(s)

MEPAAGFLSPRPFPRAAAPSAPPAGPAPANASPRSEPEVLAPRAPDPPGRLITDPLSGRTYTKGRLLG  
 KGGFARCYEATDTESGIAYAVKVIPQSRVAKPHQREKILNEIELHRDLQHRHIVRFSHHFEDADNIYIFL  
 ELCSRSLAHIWKARHTLLEPEVRYLRQILSGLKYLHQRGILHRDLKLGNNFFITDNMELKVGDFGLAAR  
 LEPPEQRKKTICGTPNYVAPEVLLRQGHGPEADVWSLGCVMYTLGSPFPFETADLKETYRCIKQVHYTL  
 PASLSLPARQLLAAILRASPRDRPSIEQILRHDFFTKGYTPDRLPVSSCVTPDLTPPNPARSLFAKVTK  
 SLFGRKKNKNKNHSEDQDNVSVSLVSGLMRTSIGHDPVRPEAPVVSQAPASLVETAEDSSPRGTLASSG  
 DGFEEGLTVATVVESALCALRNCVAFMPPAEQNPAPLAQPEPLVWVSKWVDYSNKFQYQLSSRRVAVL  
 FNDGTHMALSANRKTVHYNPTSTKHFSSMGSVPRALQPQLGILRYFASYMEQHLMKGGDLPSVEEAEPV  
 APPLLLQWVKTDQALLMLFSDGTQVQVNFYGDHTKLLILSGWEPLLVTFVARNRSACTYLASHLRQLGCSPD  
 LRQRLRYALRLLRDQSPA

**TRTRPLE** - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM\_013807

ORF Size: 1944 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\\_013807.3](#)

RefSeq Size: 2474 bp

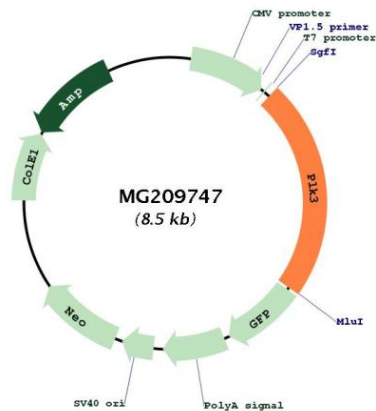
RefSeq ORF: 1947 bp

Locus ID: 12795

Cytogenetics: 4 D1

**Gene Summary:**

This gene encodes a member of the highly conserved polo-like kinase family of serine/threonine kinases. Members of this family are characterized by an amino-terminal catalytic domain and a carboxy-terminal bipartite polo box domain that functions as a substrate-binding motif and a cellular localization signal. Polo-like kinases have primarily been implicated in cell cycle regulation. In mouse, this protein that has been reported to localize to the nucleolus during interphase but is undetectable during mitosis, following nucleolus dissociation during prophase. The protein relocates to the nucleolus just prior to cytokinesis and peak levels are detected during G1 of interphase. This gene has been implicated in regulation of entry into S phase, with RNAi-induced depletion resulting in failure to re-enter the cell cycle. Mice deficient for this gene exhibit increased weight and tumor development at advanced age. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

**Product images:**

Circular map for MG209747