

## Product datasheet for **RR203879**

### **Plk2 (NM\_031821) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Plk2 (NM_031821) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plk2
Synonyms:	Snk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RR203879 representing NM\_031821  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGAGCTCCTGCGGACTATCACCTACCAGCCGGCCGCCGACCAAGATGTGCGAGCAGGCGCTGGGCA  
 AAGCTTGCGGCGGGACTCAAAGAAGAAGCGACCGCAGCAGCCTTCTGAAGACGGGACAGTCCCAAGCCCA  
 GGTGACCCCGGGCCACACACCACCATCATCACCATTCTCACTCCGGACCCGAGATCTCGCGGATTATA  
 GTCGACCCACGACGGGGAAGCGCTACTGCCGGGCAAAGTGTGGGCAAGGGTGGATTTGCAAAGTGT  
 ACGAAATGACAGATCTGACAAACAACAAGTCTACGCTGCAAAAATTATCCCTCACAGCAGAGTAGCTAA  
 ACCTCATCAAAGGAAAAGATCGACAAAGAAATGAGCTTCACAGAATCCTGCACCATAAGCATGTAGTG  
 CAGTTTTACCACTACTTTGAAGACAAAGAAAACATTTACATCCTCTTGGAGTACTGCAGTAGAAGGTCCA  
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 AATGAGGCCATGGAGCTGAAGGTTGGAGACTTCGGCTTGCTGCCAGACTGGAACCTTTGGAACACAGAA  
 GGAGAACAATATGTGGAACCCCAATTATCTCTCCCTGAAGTCTCAACAAACAAGGACATGGCTGTGA  
 ATCAGACATCTGGGCCTTAGGCTGTGTAATGTATACAATGCTGTAGGAAGACCTCCATTGAAACAACA  
 AATCTGAAAGAAACGTACAGGTGCATAAGAGAAGCAAGATATACAATGCCGTCTTCACTACTGGCCCCG  
 CCAAGCACTTGATAGCCAGCATGCTGTCCAAAACCCAGAGGACCGCCCAAGTTGGATGACATCATTCCG  
 GCATGACTTCTTCTGCAGGGCTTCACTCCAGACAGACTCTTCTAGCTGTTGCCACACAGTCCAGAC  
 TTCCACTTGTCAAGCCCAGCTAAGAATTTCTTTAAGAAAGCTGCTGCCGCTCTTTTTGGTGGCAAAAAGG  
 ACAAGCAAGATATAATGACACACACAATAAAGTGTCTAAGGAAGATGAAGACATCTACAAGCTTCGGCA  
 TGATTTGAAGAAAACATCGATAACCCAGCAACCCAGCAAAACACAGAACAGATGAGGAGCTCCAGCCTCCT  
 CCAACTACCTTTGCCAAATCTGGGACATCCGCAGTGAAAAACAACAGCAGATTGGAGATGCAATCCGGA  
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 AAAGAGCAGTTGAGCACGTCCTTTCAGTGGTCAACCAATGGTTCGACTACTCCAACAAATACGGCTTTG  
 GATACCAGCTCTCAGACCACACTGTTGGAGTCTTTTCAACAACGGCGCTCACATGAGCCTCCTCCAGA  
 CAAAAAGACAGTCACTATTATGCGGAACCTGGCCAATGCTCTGTTTTCCAGCAACAGATGCCCCCGAA  
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 AGCCTTAATGATGCTCTCAATGACGGCACATTTAGGTGAATTTCTACCACGATCATACAAGATAATT  
 ATCTGTAACAAAATGAAGAATACCTTCTCACATACATCAACGAAGACAGGATATCTACAACCTTTCAGAC  
 TGACGACCCTGTTGATGCTGGCTGTTCGCTAGAATTGAAACATCGAATGGAATACGCCCTGAACATGCT  
 CTTGCAGAGATGTAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR203879 representing NM\_031821  
 Red=Cloning site Green=Tags(s)

MELLRTITYQPAAGTKMCEQALGKACGGDSKKRPPQQPSEDGQSQAQVTPAAPHHHHHSHSGPEISRII  
 VDPTTGKRYCRGKVLGKGGFAKCYEMTDLTNNKVYAAKIIPHSRVAKPHQREKIDKEIELHRILHHKHVV  
 QFYHYFEDKENIYILLEYSRRSMAHILKARKVLTEPEVRYLRQIVSGLKYLHEQEILHRDLKLGNFII  
 NEAMELVGDFGLAARLEPLEHRRRTICGTPNYLSPEVLNKQGHGCESDI WALGCVMYTMLLGRPPFETT  
 NLKETYRCIREARYTMPSSLLAPAKHLIASMLSKNPEDRPSLDDIIRHDFFLQGF TPDRLSSSCCHTVPD  
 FHLSSPAKNFFKAAAALFGGKKDKARYNDTHNKVSKEDEDIYKLRHDLKKT SITQQPSKHRTDEELQPP  
 PTTFAKSGTSAVENKQIGDAIRMIVRGTLGSCSSSSECELEDSTMGSVADTVARVLRGCLENMPEADCIP  
 KEQLSTSFQWTKWDYSNKYGFYQLSDHTVGVLFNNGAHMSLLPDKKT VHYYAELGQCSVFPATDAPE  
 QFISQVTVLKYF SHYMEENLMDGGDLPSVTDIRRPRL YLLQWLKSDKALMMLFNDGTFQVNFYHDHTKII  
 ICNQNEEYLLTYINEDRISTTFRLTLLMSGCSLELKHMEYALNMLLQRCN

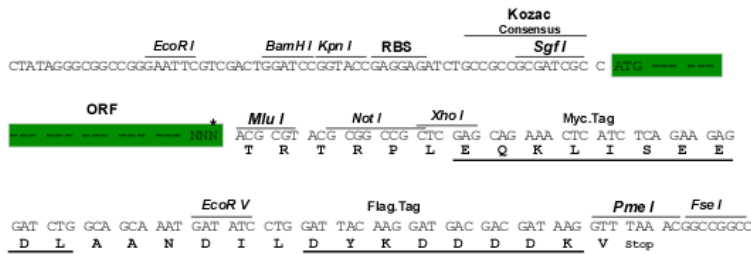
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/ja2545\\_c10.zip](https://cdn.origene.com/chromatograms/ja2545_c10.zip)

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_031821

ORF Size: 2046 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](mailto: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\\_031821.1](#), [NP\\_114009.1](#)

**RefSeq Size:** 2781 bp

**RefSeq ORF:** 2049 bp

**Locus ID:** 83722

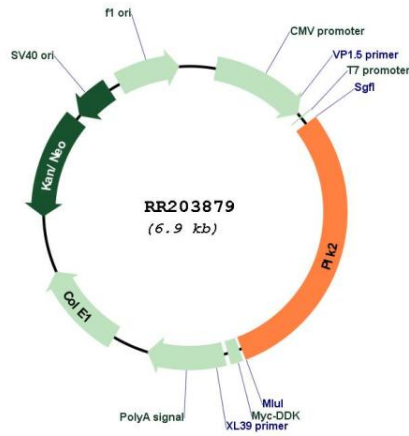
**UniProt ID:** [Q9R012](#)

**Cytogenetics:** 2q14

**MW:** 78.4 kDa

**Gene Summary:** binds Ca<sup>2+</sup> and integrin-binding protein Cib; may phosphorylate proteins in the dendrites of activated neurons; may play a role in long term synaptic plasticity [RGD, Feb 2006]

Product images:



Circular map for RR203879