

Product datasheet for **RC202499**

PLK2 (NM_006622) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLK2 (NM_006622) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLK2
Synonyms:	hPlk2; hSNK; SNK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Protein Sequence: >RC202499 representing NM_006622
 Red=Cloning site Green=Tags(s)

MELLRTITYQPAASTKMCEQALGKGCADSKKKRPPQPPEESQPPQSQAVPPAAPHHHHHSHSGPEIS
 RIIVDPTTGKRYCRGKVLGKGGFAKCYEMTDLTNNKVYAAKIIPHSRVAKPHQREKIDKEIELHRILHHK
 HVVQFYHYFEDKENIYILLEYSRRSMAILKARKVLTEPEVRYLRQIVSGLKYLHEQEILHRDLKLG
 FFINEAMELKVGFGLAARLEPLEHRRRTICGTPNYLSPEVLNKQGHGCESDI WALGCVMTMLLRPPF
 ETTNLKETYRCIREARYTMPSSLLAPAKHLIASMLSKNPEDRPSLDDIIRHDFFLQGFTPDRLSSSCHT
 VPDFHLSSPAKNFFKAAAALFGGKDKARYIDTHNRVSKEDEDIYKLRHDLKKT SITQQPSKHRTDEEL
 QPPTTTVARSGT PAVENKQIGDAIRMIVRGTLGSCSSSECLE DSTMGSVADTVARVLRGLENMPEAD
 CIPKEQLSTSFQVWKWDVSNKYGFYQLSDHTVGVLFNNGAHMSLLPDKKTVHYAELGQCSVFPATD
 APEQFISQVTVLKYF SHYMEENLMDGGDLPSVTDIRRPRLYLLQWLKSDKALMMLFNDGTFQVNFYHDHT
 KIIICSQNEEYLLTYINEDRISTTFRLLTLLMSGCSSELKNRMEYALNMLLQRCN

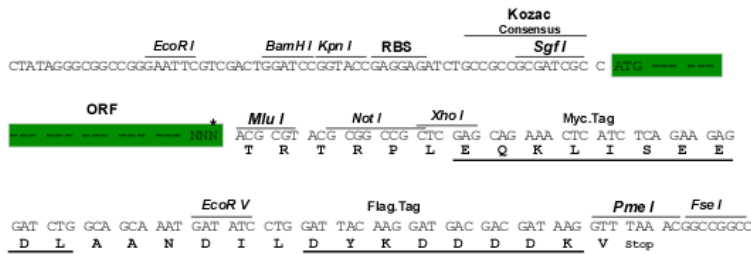
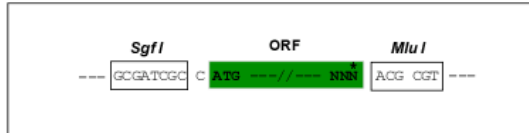
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2527_b03.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_006622

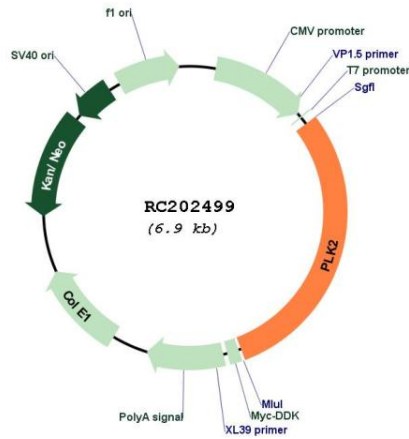
ORF Size: 2055 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_006622.4
RefSeq Size:	2972 bp
RefSeq ORF:	2058 bp
Locus ID:	10769
UniProt ID:	Q9NYY3
Cytogenetics:	5q11.2
Domains:	pkinase, POLO_box, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
MW:	78.1 kDa

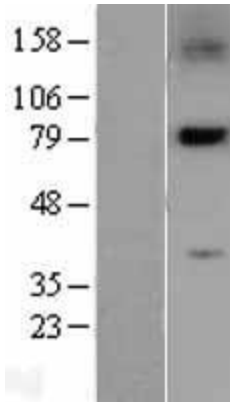
Gene Summary:

The protein encoded by this gene is a member of the polo family of serine/threonine protein kinases that have a role in normal cell division. This gene is most abundantly expressed in testis, spleen and fetal tissues, and its expression is inducible by serum, suggesting that it may also play an important role in cells undergoing rapid cell division. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]

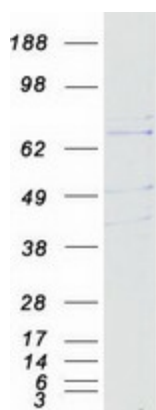
Product images:



Circular map for RC202499



Western blot validation of overexpression lysate (Cat# [LY401982]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202499 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLK2 protein (Cat# [TP302499]). The protein was produced from HEK293T cells transfected with PLK2 cDNA clone (Cat# RC202499) using MegaTran 2.0 (Cat# [TT210002]).