

## Product datasheet for **RC204962**

### **PCTAIRE1 (CDK16) (NM\_033018) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PCTAIRE1 (CDK16) (NM_033018) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCTAIRE1
Synonyms:	PCTAIRE; PCTAIRE1; PCTGAIRE; PCTK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC204962 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGATCGGATGAAGAAGATCAAACGGCAGCTGTCAATGACACTCCGAGGTGGCCGAGGCATAGACAAGA  
 CCAATGGTGCCCTGAGCAGATAGGCCTGGATGAGAGTGGTGGTGGCGGCAGTGACCCTGGAGAGGC  
 CCCACACGTGCTCCTGGGGAACCTCGTTCTGCACGGGGCCCACTCAGCTCTGCACCAGAGATTGTG  
 CACGAGGACTTGAAGATGGGGTCTGATGGGGAGAGTGACCAGGCTTACGCCACGTCCTCGGATGAGGTGC  
 AGTCTCCAGTGAGAGTGCATGCGCAACCATCCCCACGAAGATCTCCACTGAGGACATCAACAAGCG  
 CCTACTACTACCAGTGACATCCGGCTGCCTGAGGGCTACCTGGAGAAGCTGACCCTCAATAGCCCCATC  
 TTTGACAAAGCCCTCAGCCGCCCTCCGTCGTGTGAGCCTATCTGAGATTGGCTTTGGGAACTGGAGA  
 CCTACATTAAGCTGGACAACTGGCGAGGGTACCTATGCCACCGTCTACAAAGGCAAAGCAAGCTCAC  
 AGACAACCTTGTGGCACTCAAGGAGATCAGACTGGAACATGAAGAGGGGGCACCTGCACCGCCATCCGG  
 GAAGTGTCCCTGCTCAAGGACCTCAAACACGCCAACATCGTTACGCTACATGACATTATCCACACGGAGA  
 AGTCCCTCACCTTGTCTTTGAGTACCTGGACAAGGACCTGAAGCAGTACCTGGATGACTGTGGGAACAT  
 CATCAACATGCACAACGTGAAACTGTTCTGTCCAGCTGCTCCGTGGCCTGGCCTACTGCCACCGGCAG  
 AAGGTGTACACCGAGACCTCAAGCCCCAGAACCTGCTCATCAACGAGAGGGGAGAGCTCAAGCTGGCTG  
 ACTTTGGCCTGGCCGAGCCAAGTCAATCCCAACAAGACATACTCCAATGAGGTGGTGACTGTGGTA  
 CCGGCCCTGACATCCTGCTGGGTCCACGGACTACTCCACTCAGATTGACATGTGGGGTGTGGGCTGC  
 ATCTTCTATGAGATGGCCACAGGCCCTCCCTCTTTCCGGGCTCCACGGTGGAGGAACAGCTACACTCA  
 TCTTCGTATCTTAGGAACCCAACTGAGGAGACGTGGCCAGGCATCCTGTCCAACGAGGAGTTCGAAG  
 ATACAAC TACCCCAAGTACCGAGCCGAGGCCCTTTTGGCCACGCACCCGACTTGATAGCGACGGGGCC  
 GACCTCCTACCAAGCTGTTGCAGTTTGGGGTGAATCGGATCTCCGAGAGGATGCCATGAAACATC  
 CATTCTTCTCAGTCTGGGGGAGCGGATCCACAACTTCTGACACTACTTCATATTTGCACTAAAGGA  
 GATTACAGTACAAAGGAGGCCAGCCTTCGGTCTTCGTCGATGCCTGACTCAGGCAGGCCAGCTTCCCG  
 GTGGTGGACACCGAGTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204962 protein sequence  
 Red=Cloning site Green=Tags(s)

MDRMKKIKRQLSMTLRGGRGIDKTNGAPEQIGLDESGGGGSDPGEAPTRAAPGELRSARGPLSSAPEIV  
 HEDLMGSDGESDQASATSSDEVQSPVVRMRNHPPRKISTEDINKRSLPADIRLPEGYLEKLTLSPI  
 FDKPLSRRLRRVSLSEIFGKLETYIKLDKLGEGTYATVYKGSKLTDLNVALKEIRLEHEEGAPCTAIR  
 EVSLLKDLKHANIVTLHDIHTEKSLTLVFEYLDKDLKQYLDCCGNIINMHNVKLFLFQLLRGLAYCHRQ  
 KVLHRDLKPQNLINERGELKLADFGLARAKSIPTKYSNEVVTLYWRPPDILLGSTDYSTQIDMWGVC  
 IFYEMATGRPLFPGSTVEEQLHFIFRILGTPTEETWPGILSNEEFKTYNYPKYRAEALLSHAPRLSDGA  
 DLLTKLLQFEGRNRISAEDAMKHPFFLSLGERIHKLPDTSIFALKEIQLQKEASLRSSMPDSGRPAFR  
 VVDFEF

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6062\\_c02.zip](https://cdn.origene.com/chromatograms/mk6062_c02.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_033018

ORF Size: 1488 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_033018.2](#), [NP\\_148978.1](#)

RefSeq Size: 3280 bp

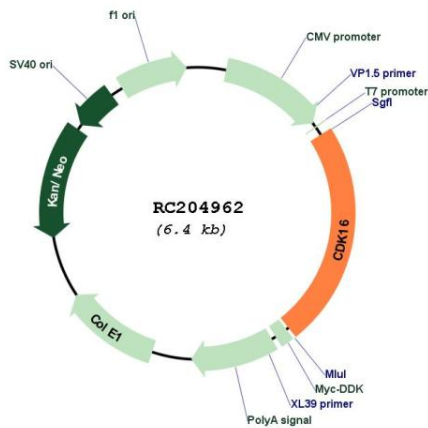
RefSeq ORF: 1509 bp

Locus ID: 5127

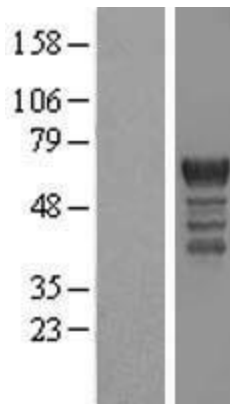
UniProt ID: [Q00536](#)  
 Cytogenetics: Xp11.3  
 Domains: pkinase, TyrKc, S\_TKc  
 Protein Families: Druggable Genome, Protein Kinase  
 MW: 55.7 kDa

**Gene Summary:** The protein encoded by this gene belongs to the cdc2/cdkx subfamily of the ser/thr family of protein kinases. It may play a role in signal transduction cascades in terminally differentiated cells; in exocytosis; and in transport of secretory cargo from the endoplasmic reticulum. This gene is thought to escape X inactivation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2009]

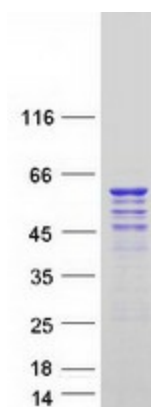
**Product images:**



Circular map for RC204962



Western blot validation of overexpression lysate (Cat# [LY409781]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204962 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDK16 protein (Cat# [TP304962]). The protein was produced from HEK293T cells transfected with CDK16 cDNA clone (Cat# RC204962) using MegaTran 2.0 (Cat# [TT210002]).