

Product datasheet for RC221884

OriGene Technologies, Inc.

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CK1 epsilon (CSNK1E) (NM_001894) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CK1 epsilon (CSNK1E) (NM_001894) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: CK1 epsilon

Synonyms: CKIe; CKIepsilon; HCKIE

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC221884 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGCTACGTGTGGGGAACAAGTACCGCCTGGGACGGAAGATCGGGAGCGGGTCCTTCGGAGATATCT ACCTGGGTGCCAACATCGCCTCTGGTGAGGAAGTCGCCATCAAGCTGGAGTGTGAAGACAAAGCACCC CCAGCTGCACATCGAGAGCAAGTTCTACAAGATGATGCAGGGTGGCGTGGGGATCCCGTCCATCAAGTGG TGCGGAGCTGAGGGCGACTACAACGTGATGGTCATGGAGCTGCTGGGGCCTAGCCTCGAGGACCTGTTCA ACTTCTGTTCCCGCAAATTCAGCCTCAAGACGGTGCTGCTCTTGGCCGACCAGATGATCAGCCGCATCGA GTATATCCACTCCAAGAACTTCATCCACCGGGACGTCAAGCCCGACAACTTCCTCATGGGGCTGGGGAAG ACATTCCCTACCGGGAAAACAAGAACCTGACCGGCACGGCCCGCTACGCTTCCATCAACACGCACCTGGG CATTGAGCAAAGCCGTCGAGATGACCTGGAGAGCCTGGGCTACGTGCTCATGTACTTCAACCTGGGCTCC CTGCCCTGGCAGGGGCTCAAAGCAGCCACCAAGCGCCAGAAGTATGAACGGATCAGCGAGAAGAAGATGT CAACGCCCATCGAGGTCCTCTGCAAAGGCTATCCCTCCGAATTCTCAACATACCTCAACTTCTGCCGCTC CCTGCGGTTTGACGACAAGCCCGACTACTCTTACCTACGTCAGCTCTTCCGCAACCTCTTCCACCGGCAG GGCTTCTCCTATGACTACGTCTTTGACTGGAACATGCTGAAATTCGGTGCAGCCCGGAATCCCGAGGATG TGGACCGGGAGCGGCGAGAACACGAACGCGAGGAGGAGGATGGGGCAGCTACGGGGGTCCGCGACCCGAGC CCTGCCCCTGGCCCACCCACGGGGGCCACTGCCAACCGGCTCCGCAGTGCCGCCGAGCCCGTGGCTTCC ACGCCAGCCTCCCGCATCCAGCCGGCTGGCAATACTTCTCCCAGAGCGATCTCGCGGGTCGACCGGGAGA GGAAGGTGAGTATGAGGCTGCACAGGGGTGCGCCCGCCAACGTCTCCTCCTCAGACCTCACTGGGCGGCA AGAGGTCTCCCGGATCCCAGCCTCACAGACAAGTGTGCCATTTGACCATCTCGGGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC221884 protein sequence

Red=Cloning site Green=Tags(s)

MELRVGNKYRLGRKIGSGSFGDIYLGANIASGEEVAIKLECVKTKHPQLHIESKFYKMMQGGVGIPSIKW CGAEGDYNVMVMELLGPSLEDLFNFCSRKFSLKTVLLLADQMISRIEYIHSKNFIHRDVKPDNFLMGLGK KGNLVYIIDFGLAKKYRDARTHQHIPYRENKNLTGTARYASINTHLGIEQSRRDDLESLGYVLMYFNLGS LPWQGLKAATKRQKYERISEKKMSTPIEVLCKGYPSEFSTYLNFCRSLRFDDKPDYSYLRQLFRNLFHRQ GFSYDYVFDWNMLKFGAARNPEDVDRERREHEREERMGQLRGSATRALPPGPPTGATANRLRSAAEPVAS TPASRIQPAGNTSPRAISRVDRERKVSMRLHRGAPANVSSSDLTGRQEVSRIPASQTSVPFDHLGK

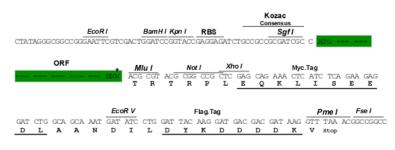
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6410 a04.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001894

ORF Size: 1248 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 customer.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. <u>More info</u>



CK1 epsilon (CSNK1E) (NM_001894) Human Tagged ORF Clone - RC221884

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: <u>NM 001894.4</u>, <u>NP 001885.1</u>

 RefSeq Size:
 2670 bp

 RefSeq ORF:
 1251 bp

 Locus ID:
 1454

 UniProt ID:
 P49674

 Cytogenetics:
 22q13.1

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Circadian rhythm - mammal, Hedgehog signaling pathway, Wnt signaling pathway

MW: 47.3 kDa

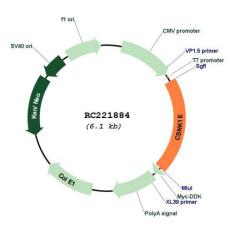
Gene Summary: The protein encoded by this gene is a serine/threonine protein kinase and a member of the

casein kinase I protein family, whose members have been implicated in the control of cytoplasmic and nuclear processes, including DNA replication and repair. The encoded protein is found in the cytoplasm as a monomer and can phosphorylate a variety of proteins, including itself. This protein has been shown to phosphorylate period, a circadian rhythm protein. Two transcript variants encoding the same protein have been found for this gene.

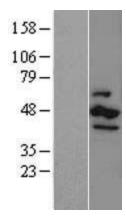
[provided by RefSeq, Feb 2014]



Product images:

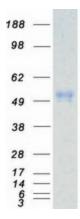


Circular map for RC221884



Western blot validation of overexpression lysate (Cat# [LY419672]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221884 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified CSNK1E protein (Cat# [TP321884]). The protein was produced from HEK293T cells transfected with CSNK1E cDNA clone (Cat# RC221884) using MegaTran 2.0 (Cat# [TT210002]).