**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RC224794

## CSNK1G1 (NM_022048) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | CSNK1G1 (NM_022048) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | CSNK1G1 |
| **Synonyms:** | CK1gamma1 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC224794 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACCATCCTAGTAGGGAAAAGGATGAAAGACAACGGACAACTAAACCCATGGCACAAAGGAGTGCAC
ACTGCTCTCGACCATCTGGCTCCTCATCGTCCTCTGGGGTTCTTATGGTGGGACCCAACTTCAGGGTTGG
CAAGAAGATAGGATGTGGGAACTTCGGAGAGCTCAGATTAGGTAAAAATCTCTACACCAATGAATATGTA
GCAATCAAACTGGAACCAATAAAATCACGTGCTCCACAGCTTCATTTAGAGTACAGATTTTATAAACAGC
TTGGCAGTGCAGGTGAAGGTCTCCCACAGGTGTATTACTTTGGACCATGTGGGAAATATAATGCCATGGT
GCTGGAGCTCCTTGGCCCTAGCTTGGAGGACTTGTTTGACCTCTGTGACCGAACATTTACTTTGAAGACG
GTGTTAATGATAGCCATCCAGCTGCTTTCTCGAATGGAATACGTGCACTCAAAGAACCTCATTTACCGAG
ATGTCAAGCCAGAGAACTTCCTGATTGGTCGACAAGGCAATAAGAAAGAGCATGTTATACACATTATAGA
CTTTGGACTGGCCAAGGAATACATTGACCCCGAAACCAAAAAACACATACCTTATAGGGAACACAAAAGT
TTAACTGGAACTGCAAGATATATGTCTATCAACACGCATCTTGGCAAAGAGCAAAGCCGGAGAGATGATT
TGGAAGCCCTAGGCCATATGTTCATGTATTTCCTTCGAGGCAGCCTCCCCTGGCAAGGACTCAAGGCTGA
CACATTAAAAGAGAGATATCAAAAAATTGGTGACACCAAAAGGAATACTCCCATTGAAGCTCTCTGTGAG
AACTTTCCAGAGGAGATGGCAACCTACCTTCGATATGTCAGGCGACTGGACTTCTTTGAAAAACCTGATT
ATGAGTATTTACGGACCCTCTTCACAGACCTCTTTGAAAAGAAAGGCTACACCTTTGACTATGCCTATGA
TTGGGTTGGGAGACCTATTCCTACTCCAGTAGGGTCAGTTCACGTAGATTCTGGTGCATCTGCAATAACT
CGAGAAAGCCACACACATAGGGATCGGCCATCACAACAGCAGCCTCTTCGAAATCAGGTGGTTAGCTCAA
CCAATGGAGAGCTGAATGTTGATGATCCCACGGGAGCCCACTCCAATGCACCAATCACAGCTCATGCCGA
GGTGGAGGTAGTGGAGGAAGCTAAGTGCTGCTGTTTCTTTAAGAGGAAAAGGAAGAAGACTGCTCAGCGC
CACAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC224794 protein sequence
Red=Cloning site Green=Tags(s)

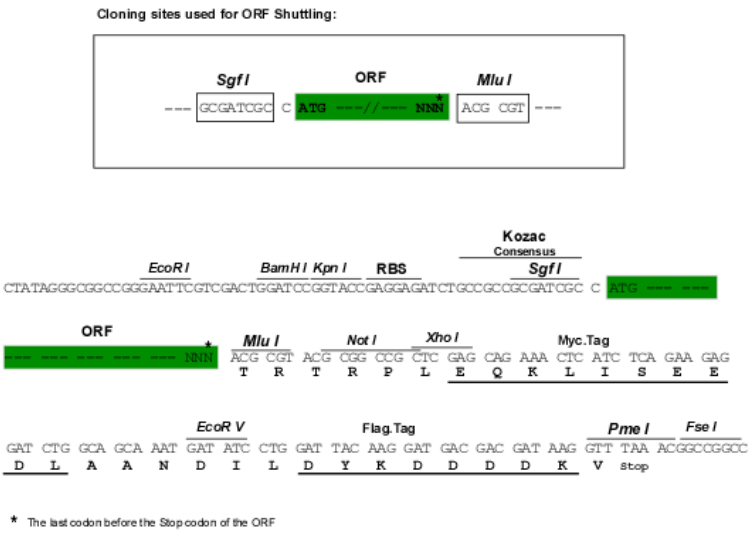
MDHPSREKDERQRTTKPMAQRSAHCSRPSGSSSSSGVLMVGPNFRVGKKIGCGNFGELRLGKNLYTNEYV
AIKLEPIKSRAPQLHLEYRFYKQLGSAGEGLPQVYYFGPCGKYNAMVLELLGPSLEDLFDLCDRTFTLKT
VLMIAIQLLSRMEYVHSKNLIYRDVKPENFLIGRQGNKKEHVIHIIDFGLAKEYIDPETKKHIPYREHKS
LTGTARYMSINTHLGKEQSRRDDLEALGHMFMYFLRGSLPWQGLKADTLKERYQKIGDTKRNTPIEALCE
NFPEEMATYLRYVRRLDFFEKPDYEYLRTLFTDLFEKKGYTFDYAYDWVGRPIPTPVGSVHVDSGASAIT
RESHTHRDRPSQQQPLRNQVVSSTNGELNVDDPTGAHSNAPITAHAEVEVVEEAKCCCFFKRKRKKTAQR
HK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6469_h10.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_022048

**ORF Size:** 1266 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_022048.5

**RefSeq Size:** 8163 bp

**RefSeq ORF:** 1269 bp

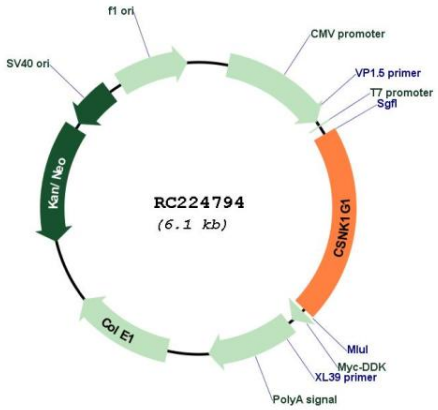
**Locus ID:** 53944

**UniProt ID:** Q9HCP0

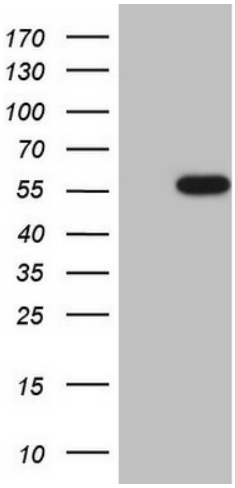
**Cytogenetics:** 15q22.31

| | |
|---|---|
| **Domains:** | pkinase, TyrKc, S_TKc |
| **Protein Families:** | Druggable Genome, Protein Kinase |
| **Protein Pathways:** | Hedgehog signaling pathway |
| **MW:** | 48.5 kDa |
| **Gene Summary:** | This gene encodes a member of the casein kinase I gene family. This family is comprised of serine/threonine kinases that phosphorylate acidic proteins such as caseins. The encoded kinase plays a role in cell cycle checkpoint arrest in response to stalled replication forks by phosphorylating Claspin. A mutation in this gene may be associated with non-syndromic early-onset epilepsy (NSEOE). [provided by RefSeq, Jul 2016] |

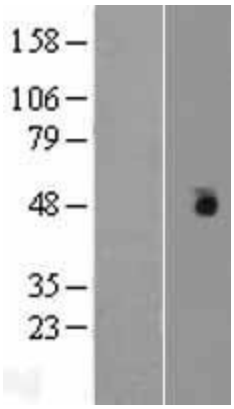
## Product images:




Circular map for RC224794




HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CSNK1G1 (Cat# RC224794, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CSNK1G1(Cat# [TA806335]). Positive lysates [LY411816] (100ug) and [LC411816] (20ug) can be purchased separately from OriGene.




Western blot validation of overexpression lysate (Cat# [LY411816]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224794 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).