

Product datasheet for **SC107027**

CKII alpha (CSNK2A1) (NM_177559) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CKII alpha (CSNK2A1) (NM_177559) Human Untagged Clone
Tag:	Tag Free
Symbol:	CKII alpha
Synonyms:	CK2A1; Cka1; Cka2; CKII; OCNDS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_177559 edited
 ATGTCGGGACCCGTGCCAAGCAGGGCCAGAGTTTACACAGATGTTAATACACACAGACCT
 CGAGAATACTGGGATTACGAGTCACATGTGGTGGAAATGGGGAAAATCAAGATGACTACCAG
 CTGGTTTCGAAAATTAGGCCGAGGTAAATACAGTGAAGTATTTGAAGCCATCAACATCACA
 AATAATGAAAAAGTTGTTGTTAAAAATTCTCAAGCCAGTAAAAAAGAGAAAATTAAGCGT
 GAAATAAAGATTTTGGAGAATTTGAGAGGAGGTCCCAACATCATCACTGGCAGACATT
 GTAAAAGACCCTGTGTCACGAACCCCGCCTTGGTTTTTGAACACGTAAACAACACAGAC
 TTCAAGCAATTGTACCAGACGTTAACAGACTATGATATTCGATTTTACATGTATGAGATT
 CTGAAGGCCCTGGATTATTGTACAGCATGGGAATTATGCACAGAGATGCAAGCCCAT
 AATGTCATGATTGATCATGAGCACAGAAAGCTACGACTAATAGACTGGGGTTTGGCTGAG
 TTTTATCATCCTGGCCAAGAATATAATGTCCGAGTTGCTTCCCGATACTCAAAGGTCTCT
 GAGCTACTTGTAGACTATCAGATGTACGATTATAGTTTGGATATGTGGAGTTTGGTTGT
 ATGCTGGCAAGTATGATCTTTCGGAAGGAGCCATTTTTCCATGGACATGACAATTATGAT
 CAGTTGGTGGAGTAGCCAAGGTTCTGGGGACAGAAGATTTATATGACTATATTGACAAA
 TACAACATTGAATTAGATCCACGTTTCAATGATATCTTGGGCAGACACTCTCGAAAGCGA
 TGGGAACGCTTTGTCCACAGTAAAAATCAGCACCTTGTACGCCCTGAGGCCTTGGATTTCT
 CTGGACAACTGCTGCGATATGACCACCAGTCACGGCTTACTGCAAGAGAGGCAATGGAG
 CACCCCTATTTTACTACTGTTGTGAAGGACCAGGCTCGAATGGGTTTCATCTAGCATGCCA
 GGGGGCAGTACGCCCGTACGAGCGCCAATATGATGTCAGGGATTTCTTCAGTGCCAACC
 CCTTACCCCTTGGACCTTGGCAGGCTACCAAGTATTGCTGCTGCCAACCCCTTGGG
 ATGCCTGTTCCAGCTGCCGCTGGCGCTCAGCAGTAA



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_177559 unedited
 TGTAATACGACTCACTATAGGGCGGCCGCAATTCGCACGAGGGTCTCCCCCTCCATC
 GCCGCCATATTGTCTGTGTGAGCAGAGGGGAGAGCGGCCGCCGCTGCCGCTTCCACC
 ACAGCTCTATCAAGGCTTGTCAAGCAGTGTGCTCATCACATCGTAAATCATGCAGCGTGG
 AACCTCATAAAATCTCCAACAAACATCATTACCCATACTGACTAGTTTCACATCTCTTT
 GTTTGAAGAAAACAGGTCTGAAACAAGGTCTTACCCCAAGCTGCTTCTGAACACAGTGAC
 TGCCAGATCTCCAACATCAAGTCCAGCTTTGTCCGCCAACCTGTCTGACATGTCGGGAC
 CCGTGCCAAGCAGGGCCAGAGTTTACACAGATGTTAATACACACAGACCTCGAGAATACC
 TGGGATTACGAGTCACATGTGGTGAATGGGAAATCAAGATGACTACCAGCTGGTTCGA
 AAATTACGCCGAGGTAATACAGTGAAGTATTTGAAGCCATCAACATCACAAATAATGAA
 AAAGTTGTTGCTAAAATTCTCAAGCCAGCAAAAAAGAACAATTAAGCGTGAAATAAAGA
 TTTTGGAGAATTTGAGAGGAGGTCCCACCATCATCACTGGCAGACATGTAAGAACCC
 TGTGTCACGAACCCCGCCTTGGTTTTGAACACCAACACACAGACTTAAGCAATTGTAC
 CAGACGTCTACAGACTATGAATATCCGATCTTACATGTATGACATTCCGAAAGCCCTTGA
 ATATTGTCCCAGCATGGGAATTATGCACAGAGATGCCAGCCCAATAAGTCATGATTGAC
 CCGGACCCCAAAAGCCTACCAATAGAACCGCGTTTGGCTGAGTTTTATCATCCGCCAA
 CAATAAAGCCCGCAGTGCCTCCGAACCTTAAGGCCCGGGCTTC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_177559 unedited
 CTGTTACCGCGCCGCATTCTANATCGAGTTTTTCTTTTTTTTTTCACTATGAAGGAC
 AAAGTATTATATATACACACAGCAAGGGTGGCGGGCTGTAACAAGAGATTTATAG
 TTTTCCACAATTACAGGTCTACCATTTACAGTTCATGGAGATAGTGGCTCTGCTCCTA
 CCTCTCAAGATACATTTACAAGACTGAGGATCAGGTCTTCTCACTGGATGGCATGTGAGG
 GAAGGGGACGGTCGGAGGAAAAGAAGGTAGAAAGCTTAAATGGAAGTCAGTGTGGCCAC
 ATCTCCATTAGCTCTAGCATGAAACCTGTACAGACAATGTTTGTCTTTTGTAAAAAG
 CAGTAAGTTATGCCAGTAACTAAATGAATTCAAAATGGCCAAGACAAAGAAAATAAGA
 AAGATTTTGCCTTCCCTCTCCTACCAGCTATGGAGCACAGCATGTTGGGAGATGAACAGG
 GAAAAGACCAAGGTAAGGAGCCTGNGAGGGAAGGTATCAACATTTTAACTGAATAAAA
 ATAAAAGTATAAATGAGTTGGATTTAGGGTTAGATCAGTAAGACATGATTCTTACTGAAC
 AGAAGTTTTTAGTATCTGTCTGCATTTTGGGTAGATTTTCAACATCTTGATGTAACAAAG
 ACACACTTCCAACAGAGCCACTAGGATAACCCCACTGAAGCGCTTATGGAGTAAAGTGAT
 GTAAGCGACCAAGCAGCAGTCCACTGCTCCTATAGATTGGGTCTNCCCTTCTCTTNNCT
 TCCTTCTTNNCTTCTGGCTCCCCTGAGAACTACATTTTGTATTCTCTGGAGAAGACC
 CCGAAATACCAACCCCTTAAAGTGTGGGACCGTGGAAAGAAACATGTGTGGAATGGGAAGAA
 TCCCCACTAAATGCACCACCCCGATTGAGGCTGTTACCTTTGTCTTTTGTATAAGA
 A

Restriction Sites:

NotI-NotI

ACCN:

NM_177559

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 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](#)

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_177559.2](#), [NP_808227.1](#)

RefSeq Size: 2849 bp

RefSeq ORF: 1176 bp

Locus ID: 1457

UniProt ID: [P68400](#)

Cytogenetics: 20p13

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

Protein Pathways: Adherens junction, Tight junction, Wnt signaling pathway

Gene Summary: Casein kinase II is a serine/threonine protein kinase that phosphorylates acidic proteins such as casein. It is involved in various cellular processes, including cell cycle control, apoptosis, and circadian rhythm. The kinase exists as a tetramer and is composed of an alpha, an alpha-prime, and two beta subunits. The alpha subunits contain the catalytic activity while the beta subunits undergo autophosphorylation. The protein encoded by this gene represents the alpha subunit. Multiple transcript variants encoding different protein isoforms have been found for this gene. [provided by RefSeq, Apr 2018]

Transcript Variant: This variant (1) encodes the longer isoform (a). Variants 1, 2, 4 and 5 encode the same protein.