

Product datasheet for **RG208789**

CKII alpha (CSNK2A1) (NM_177560) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CKII alpha (CSNK2A1) (NM_177560) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CKII alpha
Synonyms:	CK2A1; Cka1; Cka2; CKII; OCNDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208789 representing NM_177560 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGGACCCGTGCCAAGCAGGGCCAGAGTTTACACAGATGTTAATACACACAGACCTCGAGAATACT
GGGATTACGAGTCACATGTGGTGGAAATGGGAAATCAAGATGACTACCAGCTGGTTCGAAAATTAGGCCG
AGGTAATACAGTGAAGTATTTGAAGCCATCAACATCACAAATAATGAAAAAGTTGTTGTTAAAATTCTC
AAGCCAGTAAAAAGAAGAAAATTAAGCGTGAAATAAAGATTTTGGAGAATTTGAGAGGAGGTCCCAACA
TCATCACACTGGCAGACATTGTAAGACCCCTGTGTACGAACCCCGCCTTGGTTTTTGAACACGTAAA
CAACACAGACTTCAAGCAATTGTACCAGACGTTAACAGACTATGATATTCGATTTACATGTATGAGATT
CTGAAGGCCCTGGATTATTGTCACAGCATGGGAATTATGCACAGAGATGTCAAGCCCATAATGTCATGA
TTGATCATGAGCAGAAAGCTACGACTAATAGACTGGGGTTTGGCTGAGTTTTATCATCTGGCCAAGA
ATATAATGTCCGAGTTGCTTCCCGATACTTCAAAGTCTGAGCTACTTGTAGACTATCAGATGTACGAT
TATAGTTTGGATATGTGGAGTTTGGTTGTATGCTGGCAAGTATGATCTTTCGGAAGGAGCCATTTTCC
ATGGACATGACAATTATGATCAGTTGGTGGAGTAGCCAAGTTCTGGGGACAGAAGATTTATATGACTA
TATTGACAAATACAACATTGAATTAGATCCACGTTTCAATGATATCTTGGGCAGACACTCGAAAGCGA
TGGGAACGCTTTGTCCACAGTGAAAATCAGCACCTTGTACGCCCTGAGGCCTTGGATTTCTGGACAAAC
TGCTGCGATATGACCACAGTCACGGCTTACTGCAAGAGAGGCAATGGAGCACCCCTATTTCTACACTGT
TGTGAAGGACCAGGCTCGAATGGTTTCATCTAGCATGCCAGGGGACAGTACGCCCGTCAGCAGCGCAAT
ATGATGTCAGGGATTTCTTCAGTGCCAACCCCTTCAACCCCTTGGACCTCTGGCAGGCTCACCAGTGATTG
CTGCTGCCAACCCCTTGGGATGCCTGTTCAGCTGCCGCTGGCCTCAGCAG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208789 representing NM_177560
 Red=Cloning site Green=Tags(s)

MSGPVPSRARVYTDVNTHRPREYWDYESHVVEWGNQDDYQLVRKLGKGYSEVFEAINITNNEKVVVKIL
 KPVKIKKIKREIKILENLRGGPNIITLADIVKDPVSRTPALVFEHVNNTDFKQLYQTLTDYDIRFYMYEI
 LKALDYCHSMGIMHRDVKPHNVIMIDHEHRKLRLLIDWGLAEFYHPGQEQYVNRVVASRYFKGPELLVDYQMYD
 YSLDMWSLGCMLASMIFRKEPFFHGHNDYDQLVRIAKVLGTEDLYDYIDKYNIELDPRFNDILGRHSRKR
 WERFVHSENQHLVSPALDFLDKLLRYDHQSRLTAREAMEHPYFYTVVKDQARMGSSSMPGGSTPVSSAN
 MMSGISSVPTSPPLGPLAGSPVIAAANPLGMPVPAAGAQQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_177560

ORF Size: 1173 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_177560.2](#), [NP_808228.1](#)

RefSeq Size: 2522 bp

RefSeq ORF: 768 bp

Locus ID: 1457

UniProt ID: [P68400](#)

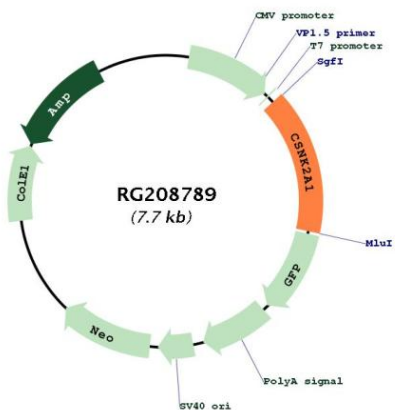
Cytogenetics: 20p13

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]

Product images:



Circular map for RG208789