

## Product datasheet for RC202435

### CSNK2A2 (NM\_001896) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CSNK2A2 (NM_001896) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CSNK2A2
Synonyms:	CK2A2; CK2alpha'; CSNK2A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202435 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCCCGCCCGGCCGCGGGCAGCAGGGCCGGGTCTACGCCGAGGTGAACAGTCTGAGGAGCCGCGAGT  
ACTGGGACTACGAGGCTCACGTCCCGAGCTGGGGTAATCAAGATGATTACCAACTGGTTCGAAAACCTGG  
TCGGGGAAAATATAGTGAAGTATTTGAGGCCATTAATATCACCAACAATGAGAGAGTGGTTGAAAAATC  
CTGAAGCCAGTGAAGAAAAAGAAGATAAAACGAGAGGTTAAGATTCTGGAGAACCCTCGTGGTGAACAA  
ATATCATTAAAGCTGATTGACACTGTAAAGACCCCGTGTCAAAGACACCAGCTTTGGTATTTGAATATAT  
CAATAATACAGATTTTAAGCAACTCTACCAGATCCTGACAGACTTTGATATCCGGTTTTATATGTATGAA  
CTACTTAAAGCTCTGGATTACTGCCACAGCAAGGGAATCATGCACAGGGATGTGAAACCTCACAATGTCA  
TGATAGATCACCAACAGAAAAAGCTGCGACTGATAGATTGGGGTCTGGCAGAATTCTATCATCTCTGCTCA  
GGAGTACAATGTTCTGTAGCCTCAAGGTACTTCAAGGGACCAGAGCTCCTCGTGGACTATCAGATGTAT  
GATTATAGCTTGGACATGTGGAGTTTGGGCTGTATGTTAGCAAGCATGATCTTTCGAAGGGAACCTTCT  
TCCATGGACAGGACAACATGACCAGCTTGTTCGATTGCCAAGGTTCTGGGTACAGAAGAACTGTATGG  
GTATCTGAAGAAGTATCACATAGACCTAGATCCACACTTCAACGATATCTGGGACAACATTACCGGAAA  
CGCTGGGAAAACCTTATCCATAGTGAGAACAGACACCTTGTGAGCCCTGAGGCCCTAGATCTTCTGGACA  
AACTTCTGCGATACGACCATCAACAGAGACTGACTGCCAAAGAGGCCATGGAGCACCCATACTTCTACCC  
TGTGGTGAAGGAGCAGTCCAGCCTTGTGCAGACAATGCTGTGCTTTCCAGTGGTCTCACGGCAGCACGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC202435 protein sequence  
Red=Cloning site Green=Tags(s)

MPGPAAGSRARVYAEVNSLRSEYWDYEAHVPSWGNQDDYQLVRKLGKGYSEVFEAINITNNERVVVKI  
 LKPVKKKIKREVKILENLRGGTNIKILIDTVKDPVSKTPALVFEYINNTDFKQLYQILTDFDIRFYMYE  
 LLKALDYCHSKGIMHRDVKPHNVIMDHQQKRLRIDWGLAEFYHPAQEYNVRVASRYFKGPPELLVDYQMY  
 DYSLDMWSLGCMLASMIFFRREPFHFGQDNYDQLVRIAKVLGTEELYGYLKKYHIDLDPHFNDILGQHSRK  
 RWENFIHSENRHLVSPEALDLLDKLLRYDHQQLTAKEAMEHPYFYPVVKESQSPCADNAVLSSGLTAAR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6151\\_h06.zip](https://cdn.origene.com/chromatograms/mk6151_h06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001896

**ORF Size:** 1050 bp

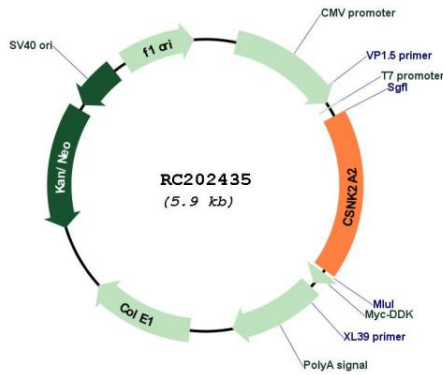
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

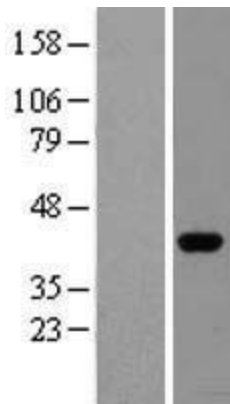
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001896.4</a>
<b>RefSeq Size:</b>	1674 bp
<b>RefSeq ORF:</b>	1053 bp
<b>Locus ID:</b>	1459
<b>UniProt ID:</b>	<a href="#">P19784</a>
<b>Cytogenetics:</b>	16q21
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Adherens junction, Tight junction, Wnt signaling pathway
<b>MW:</b>	41.2 kDa
<b>Gene Summary:</b>	<p>This gene encodes the alpha', or alpha 2, catalytic subunit of the protein kinase enzyme, casein kinase 2 (CK2). Casein kinase 2 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 rhythms. This heterotetrameric kinase includes two catalytic subunits, either alpha or alpha', and two regulatory beta subunits. The closely related gene paralog encoding the alpha, or alpha 1 subunit (CSNK2A1, Gene ID: 1457) is found on chromosome 20. An intronic variant in this gene (alpha 2) may be associated with leukocyte telomere length in a South Asian population. A related transcribed pseudogene is found on chromosome 11. [provided by RefSeq, Aug 2017]</p>

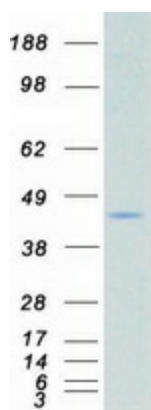
Product images:



Circular map for RC202435



Western blot validation of overexpression lysate (Cat# [LY400706]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202435 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CSNK2A2 protein (Cat# [TP302435]). The protein was produced from HEK293T cells transfected with CSNK2A2 cDNA clone (Cat# RC202435) using MegaTran 2.0 (Cat# [TT210002]).