

Product datasheet for MR205293

Csnk2a2 (NM_009974) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Csnk2a2 (NM_009974) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Csnk2a2
Synonyms:	1110035J23Rik; C77789; CK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205293 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGGATCGCC**

ATGCCCGGCCCGCCGCGGGCAGTCGGGCCGGGTCTACGCCAGGTGAACAGCCTGAGGAGCCGCGAGTACTGGGACTACGAAGCCACGTCCCGAGCTGGGTAATCAAGATGATTACCAACTGGTTCGAAAACCTTGGTCGGGGCAAGTATAGTGAAGTATTTGAGGCCATTAACATCACCAACAATGAGAGGGTGGTTGTAATAATCTCAAGCCAGTGAAGAAAAAGAAGATAAAACGAGAGGTTAAGATTCTGGAGAACCCTCGTGGTGAACAAATATCATTAAAGCTGATTGACACTGTAAAGACCCTGTGTCAAAGACACCAGCTTTGGTATTTGAATATACAATAACAGATTTTAAGCAACTCTACCAGATCCTGACTGACTTTGATATCCGGTTTTATATGTATGAACTACTTAAAGCTCTGGATTACTGCCACAGCAAGGGAATCATGCACAGGGATGTGAAACCTCACAATGTCTAGTAGATCACCAACAAAAAAGCTCCGACTGATTGATTGGGGTCTGGCAGAGTTCTATCATCTCTGCTCAGAGTACAATGTTTCGAGTGGCCTCGAGGTACTCAAGGGACCAGAGCTCCTTGTGGACTATCAGATGTATGATTATAGCTTGGACATGTGGAGCTTGGGCTGCATGTTAGCGAGCATGATATCCGAAAGGAGCCATTCTCCACGGGCAGGACAACATGACCAGCTTGTTCGAATTGCCAAGGTTCTGGGGACAGATGAACATATGGTTATCTGAAGAAGTACCACATAGACCTAGATCCACACTTCAATGATATCCTGGGACAACATTACCGAAGCGCTGGGAAAACCTTTATCCATAGTGAGAACAGGCACCTTGTGAGCCGGAGGCCATAGATCTTCTTGACAGCTCTGCGGTACGACCATCAACAGAGATTGACCGCCAAAGAGGCCATGGAGCACCCATATTTCTACCGTGGTGAAGGAGCAGTCCAGCCTTGTGCTGAGAACACCGTGCTTTCCAGTGGTCTCACCGCAGCACGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR205293 protein sequence
Red=Cloning site Green=Tags(s)

MPGPAAGSRARVYAEVNSLRSEYWDYEAHVPSWGNQDDYQLVRKLGKGYSEVFEAINITNNERVVVKI
 LKPVKIKKREVKILENLRGGTNIKILIDTVKDPVSKTPALVFEYINNTDFKQLYQILTDFDIRFYMYE
 LLKALDYCHSKGIMHRDVKPHNVMIDHQKQLRLIDWGLAEFYHPAQEYNVRVASRYFKGPELLVDYQMY
 DYSLDMWSLGCMLASMI FRKEPFFHGQDNYDQLVRIAKVLGTDELYGYLKKYHIDLDPHFNDILGQHSRK
 RWENFIHSENRHLVSPEALDLLDKLLRYDHQQRLLTAKEAMEHPYFYPVVKESQSPCAENTVLSGLTAAR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_009974

ORF Size: 1053 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_009974.3](#)

RefSeq Size: 3766 bp

RefSeq ORF: 1053 bp

Locus ID: 13000

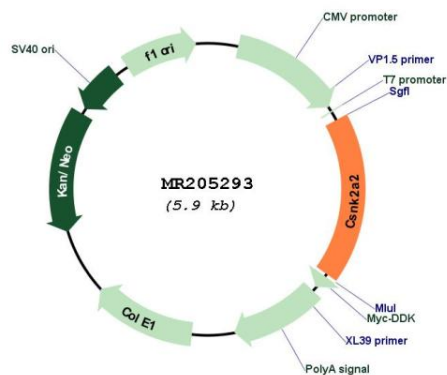
UniProt ID: [O54833](#)

Cytogenetics: 8 47.12 cM

MW: 41.2 kDa

Gene Summary: Catalytic subunit of a constitutively active serine/threonine-protein kinase complex that phosphorylates a large number of substrates containing acidic residues C-terminal to the phosphorylated serine or threonine. Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection. May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response. During mitosis, functions as a component of the p53/TP53-dependent spindle assembly checkpoint (SAC) that maintains cyclin-B-CDK1 activity and G2 arrest in response to spindle damage. Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation. Can also negatively regulate apoptosis. Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3. Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8. Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV. Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB. Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function. Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1. Acts as an ectokinase that phosphorylates several extracellular proteins (By similarity).
[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205293