

Product datasheet for **MG205293**

Csnk2a2 (NM_009974) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Csnk2a2 (NM_009974) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Csnk2a2
Synonyms:	1110035J23Rik; C77789; CK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205293 representing NM_009974 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGCCCGCCGCGGGCAGTCGGGCCGGGTCTACGCCGAGGTGAACAGCCTGAGGAGCCGCGAGT
ACTGGGACTACGAAGCCACGTCCCGAGCTGGGTAATCAAGATGATTACCAACTGGTTCGAAAACCTTGG
TCGGGGCAAGTATAGTGAAGTATTTGAGGCCATTAACATCACCAACAATGAGAGGGTGGTTGAAAAATT
CTCAAGCCAGTGAAGAAAAAGAAGATAAAACGAGAGGTTAAGATTCTGGAGAACCTTCGTGGTGAACAA
ATATCATTAAAGCTGATTGACACTGTAAAGACCCTGTGTCAAAGACACCAGCTTTGGTATTTGAATATAT
CAATAATACAGATTTTAAGCAACTCTACCAGATCCTGACTGACTTTGATATCCGGTTTTATATGTATGAA
CTACTTAAAGCTCTGGATTACTGCCACAGCAAGGGAATCATGCACAGGGATGTGAAACCTCACAATGTCA
TGATAGATCACCAACAAAAAAGCTCCGACTGATTGATTGGGGTCTGGCAGAGTTCTATCATCTCTGCTCA
GGAGTACAATGTTTCGAGTGGCCTCGAGGTACTTCAAGGGACCAGAGCTCCTTGTGGACTATCAGATGTAT
GATTATAGCTTGGACATGTGGAGCTTGGGCTGCATGTTAGCGAGCATGATATCCGAAAGGAGCCATTCT
TCCACGGGCAGGACAACATGACCAGCTTGTTCGAATTGCCAAGGTTCTGGGGACAGATGAACATATAGG
TTATCTGAAGAAGTACCACATAGACCTAGATCCACACTTCAATGATATCCTGGGACAACATTACCGAAG
CGCTGGGAAAACTTTATCCATAGTGAGAACAGGCACCTTGTGAGCCGGAGGCCATAGATCTTCTTGACA
AGCTCCTGCGGTACGACCATCAACAGAGATTGACCGCCAAGAGGCCATGGAGCACCCATATTTCTACCC
GGTGGTGAAGGAGCAGTCCAGCCTTGTGCTGAGAACACCGTGCTTTCCAGTGGTCTCACCGCAGCACGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205293 representing NM_009974
 Red=Cloning site Green=Tags(s)

MPGPAAGSRARVYAEVNSLRSEYWDYEAHVPSWGNQDDYQLVRKLGKGYSEVFEAINITNNERVVVKI
 LKPVKKKKIKREVKILENLRGGTNIKLIKIDTVKDPVSKTPALVFEYINNTDFKQLYQILTDFDIRFYMYE
 LLKALDYCHSKGIMHRDVKPHNVIMIDHQKQLRLIDWGLAEFYHPAQEYNVRVASRYFKGPELLVDYQMY
 DYSLDMWSLGCMLASMIFRKEPFFHGQDNYDQLVRIAKVLGTDELYGYLKKYHIDLDPHFNDILGQHSRK
 RWENFIHSENRHLVSPEALDLLDKLLRYDHQQRLLTAKEAMEHPYFYPVVKESQSPCAENTVLSGLTAAR

TRTRPLE - GFP Tag - V

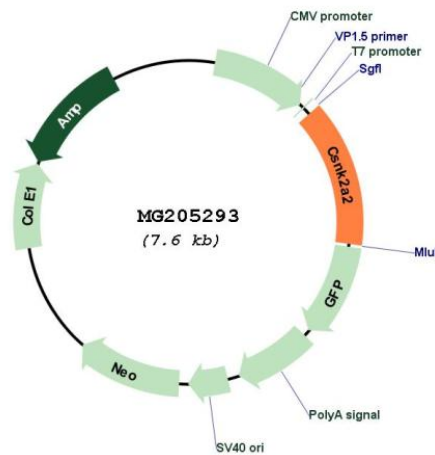
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_009974

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).
Reconstitution Method:	<ol style="list-style-type: none">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:	1877 bp
RefSeq ORF:	1053 bp
Locus ID:	13000
UniProt ID:	O54833
Cytogenetics:	8 47.12 cM
Gene Summary:	<p>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).</p> <p>[UniProtKB/Swiss-Prot Function]</p>