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Product datasheet for MG216302

Csnk1g2 (NM_001159591) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Csnk1g2 (NM_001159591) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Csnk1g2
Synonyms:	2810429I12Rik; AI463719
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG216302 representing NM_001159591
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATTTTGACAAGAAAGGAGGGAAGGGGGAGTTGGAGGAGGGCAGGAGAATGTCCAAAACCGGCACGA
GTCGGAGCAACCACGGCGTCCGCAGTTCGGGGACCAGCTCAGGGGTCCTGATGGTGGGCCCAAACTTCCG
AGTCGGCAAGAAGATAGGCTGTGGGAACTTCGGGGAGCTTCGCCTAGGAAAGAATCTGTATACAAATGAG
TACGTGGCTATCAAGCTGGAGCCCATCAAGTCCCGGGCCCCACAGCTGCACCTGGAGTACCGCTTTTACA
AGCAGCTCAGCACGACAGAGGGCGTCCCTCAGGTCTACTACTTCGGCCCTTGTGGGAAGTACAACGCCAT
GGTGCTGGAGCTGCTGGGGCCCAGCCTGGAGGACCTTTTCGACCTGTGCGACCGCACCTTCACGCTGAAG
ACGGTGCTGATGATCGCCATCCAGCTGATCACGCGCATGGAGTACGTGCACACCAAGAGCCTCATCTACC
GTGACGTGAAGCCCGAGAACTTCCTGGTTGGGCGGCCGGGCAGCAAGCGGCAGCACTCCATCCACATCAT
CGACTTTGGGCTGGCCAAGGAGTACATCGACCCTGAGACTAAGAAGCACATCCCATATCGCGAGCACAAG
AGCCTGACAGGCACTGCGCGCTACATGAGCATCAACACGCACTTGGGCAAAGAGCAGAGCCGCCGGGATG
ACCTGGAGGCGCTGGGACACATGTTCATGTACTTCCTGCGCGGCAGTCTGCCCTGGCAGGGGCTCAAGGC
AGACACGCTGAAGGAGCGCTACCAGAAGATTGGAGACACCAAGCGTGCCACACCAATCGAGGTGCTGTGT
GAGAGCTTCCCGGAGGAGATGGCCACCTATTTGCGCTATGTGCGGCGCCTAGACTTTTTTGAGAAGCCAG
ACTACGACTACCTGAGGAAGCTCTTCACTGACCTCTTTGACCGCAGCGGCTACGTGTTTGACTACGAGTA
TGACTGGGCCGGCAAGCCCCTGCCGACACCCATCGGCACCGTCCACCCTGACGTGCCCTCCCAGCCACCA
CATCGCGACAAAGCTCAGCTCCACACCAAGAACCAGGCGCTCAACTCCACTAATGGAGAGCTGAACACAG
ACGACCCCACCGCGGGCCACTCCAACGCCCCCATCGCGGCCCCCGCAGAAGTAGAGGTGGCAGATGAAAC
AAAGTGCTGCTGCTTCTTCAAGAGGAGAAAGAGAAAATCGCTGCAGCGACATAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

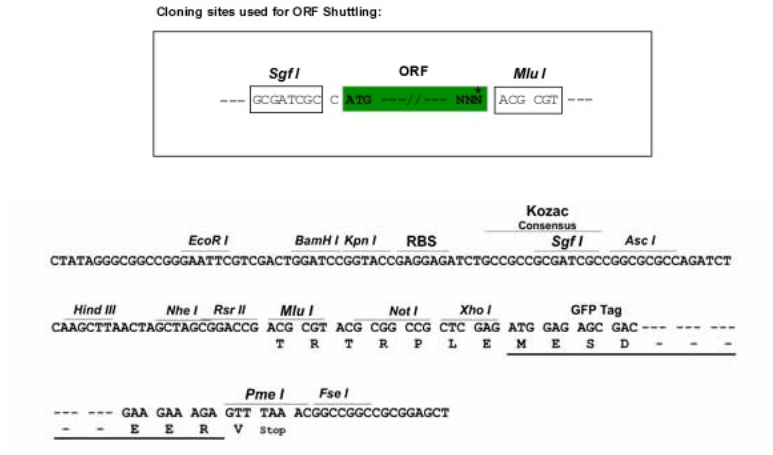
>MG216302 representing NM_001159591
Red=Cloning site Green=Tags(s)

MDFDKKGGKGELEEGRRMSKTGTSRSNHGVRSSGTSSGVLMVGPNFRVGKKIGCGNFGELRLGKNLYTNE
YVAIKLEPIKSRAPQLHLEYRFYKQLSTTEGVPQVYYFGPCGKYNAMVLELLGPSLEDLFDLCDRTFTLK
TVLMIAIQLITRMEYVHTKSLIYRDVKPENFLVGRPGSKRQHSIHIIDFGLAKEYIDPETKKHIPYREHK
SLTGTARYMSINTHLGKEQSRRDDLEALGHMFMYFLRGSLPWQGLKADTLKERYQKIGDTKRATPIEVLC
ESFPEEMATYLRYVRRLDFFEKPDYDYLRKLFTDLFDRSGYVFDYEYDWAGKPLPTPIGTVHPDVPSQPP
HRDKAQLHTKNQALNSTNGELNTDDPTAGHSNAPIAAPAEVEVADETKCCCFFKRRKRKSLQRHK

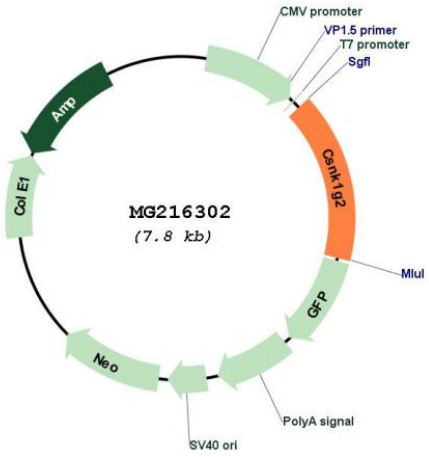
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001159591

ORF Size:	1245 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_001159591.1, NP_001153063.1
RefSeq Size:	2259 bp
RefSeq ORF:	1248 bp
Locus ID:	103236
UniProt ID:	Q8BVP5
Cytogenetics:	10 C1
Gene Summary:	Serine/threonine-protein kinase. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling (By similarity). Phosphorylates COL4A3BP/CERT, MTA1 and SMAD3. Involved in brain development and vesicular trafficking and neurotransmitter releasing from small synaptic vesicles. Regulates fast synaptic transmission mediated by glutamate. SMAD3 phosphorylation promotes its ligand-dependent ubiquitination and subsequent proteasome degradation, thus inhibiting SMAD3-mediated TGF-beta responses. Hyperphosphorylation of the serine-repeat motif of COL4A3BP/CERT leads to its inactivation by dissociation from the Golgi complex, thus down-regulating ER-to-Golgi transport of ceramide and sphingomyelin synthesis. Triggers PER1 proteasomal degradation probably through phosphorylation.[UniProtKB/Swiss-Prot Function]