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Product datasheet for MG203949

Ccnd2 (NM_009829) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ccnd2 (NM_009829) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ccnd2
Synonyms:	2600016F06Rik; AI256817; BF642806; C86853; cD2; Vin-1; Vin1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG203949 representing NM_009829
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCTGCTGTGCTGCGAGGTGGACCCGGTCCGCAGGGCCGTGCCGGACCGCAACCTGCTGGAAGACC
GCGTTCTGCAGAACCTGTTGACCATCGAGGAGCGCTACCTCCCGCAGTGTTCCTATTTCAAGTGCGTGCA
GAAGGACATCCAACCGTACATGCGCAGGATGGTGGCCACCTGGATGCTAGAGGTCTGTGAGGAACAAAAG
TGTGAAGAAGAGGTCTTTCCTCTGGCCATGAATTACCTGGACCGTTTCTTGGCTGGAGTCCCGACTCCTA
AGACCCATCTTCAGCTCCTGGGTGCAGTGTGCATGTTCCTAGCTTCCAAGCTGAAAGAGACCATCCCGCT
GACTGCGGAAAAGCTGTGCATTTACACCGACAACTCTGTGAAGCCCCAGGAGCTGCTGGAGTGGGAACTG
GTAGTGTTGGGTAAGCTGAAGTGGAACCTGGCCGCAGTCACCCCTCACGACTTCATTGAGCACATCCTTC
GCAAGCTGCCCCAGCAAAAGGAGAAGCTGTCCCTGATCCGCAAGCATGCGCAGACCTTCATCGCTCTGTG
CGCTACCGACTTCAAGTTTGCCATGTACCCGCCGTCGATGATTGCAACTGGAAGCGTGGGAGCAGCCATC
TGTGGGCTTCAGCAGGATGATGAAGTGAACACACTCACGTGTGATGCCCTGACAGAGCTGCTGGCCAAGA
TCACCCACACTGATGTGGATTGTCTCAAAGCCTGCCAGGAGCAAATCGAAGCTCTGCTGCTGAACAGCCT
GCAGCAGTTCCGTCAAGAGCAGCATAACGCCGGATCCAAGTCTGTGGAAGATCCGGACCAAGCCACCACC
CCTACAGACGTGCGGGATGTTGACCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

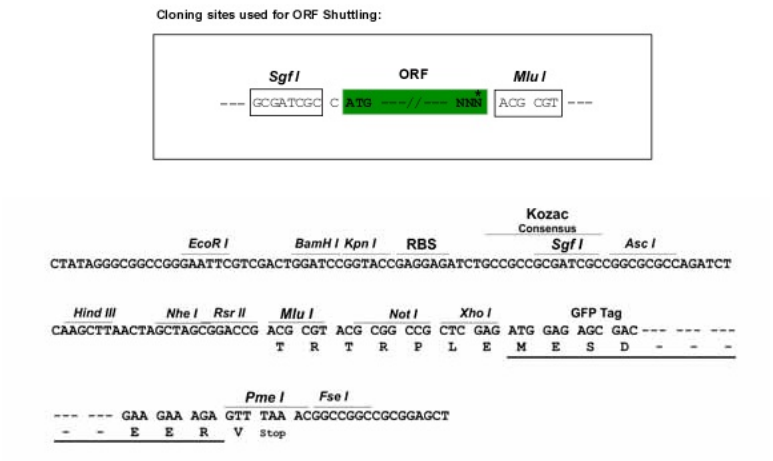
>MG203949 representing NM_009829
Red=Cloning site Green=Tags(s)

MELLCCEVDPVRRAVPDRNLLEDRVLQNLLTIEERYLPQCSYFKCVQKDIQPYMRRMVATWMLEVCEEQK
CEEEVFPLAMNYLDRFLAGVPTPKTHLQLLGAVCMFLASKLKETIPLTAEKLCIYTDNSVKPQELLEWEL
VVLGKLKWNLAAVTPHDFIEHILRKLPQQKEKLSLIRKHAQTFIALCATDFKFAMYPPSMIATGSVGAAI
CGLQQDDEVNTLTCDALTELLAKITHTDVDCLKACQEQIEALLLNSLQQFRQEQHNAGSKSVEDPDQATT
PTDVRDVDL

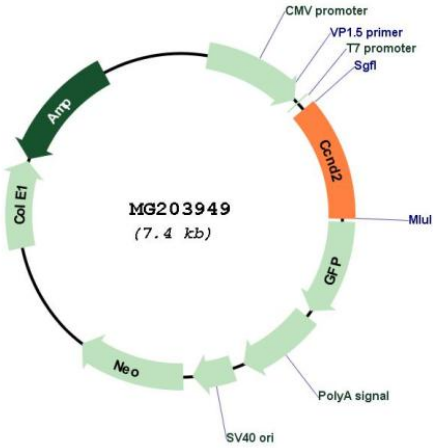
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009829

ORF Size: 867 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_009829.3, NP_033959.1
RefSeq Size:	5772 bp
RefSeq ORF:	870 bp
Locus ID:	12444
UniProt ID:	P30280
Cytogenetics:	6 61.92 cM
Gene Summary:	Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D2/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).[UniProtKB/Swiss-Prot Function]