

Product datasheet for **RG222810**

CDC2L1 (CDK11B) (NM_033493) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC2L1 (CDK11B) (NM_033493) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDK11B
Synonyms:	CDC2L1; CDK11; CDK11-p46; CDK11-p58; CDK11-p110; CLK-1; p58; p58CDC2L1; p58CLK-1; PK58
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG222810 ORF sequence, **codon optimized**.
 Due to the complexity of NM_033493, the ORF clone is codon optimized for mammalian Expression.
 The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**

ATGGGCGATGAGAAAGACAGCTGGAAGGTAAAACTCTTGACGAGATACTTCAGGAAAAAAGCGCCGCA
 AGGAACAGGAAGAGAAGGCCGAGATAAAGCGGCTGAAGAAGCTCAGACGATAGAGATTCAAAGCGGGACAG
 CCTGGAAGAGGGTGAGTTGAGGGATCATTGTATGGAAATCACAATTCGAAACAGTCCGTACCGCCGCGAG
 GACAGTATGGAAGACCGGGGAGAGGAGGATGACTCATTGGCCATTAAGCCTCCTCAGCAGATGTCCCGCA
 AAGAGAAGGTGCATCATAGGAAAAGACGAGAAGCGGAAGGAAAAAAGCACGCGAGAGTTAAGGAAAAAGA
 GCGAGAGCATGAGCGACGAAAAGGCATCGCGAGGAACAGGATAAAGCCAGGCGCGAGTGGGAACGCCAG
 AAGCGCCGCGAAATGGCCAGAGAACATTCTAGAAGAGAGAGAGATAGGCTCGAACAGCTGGAAAAGGAAGA
 GAGAAAGAGAAAGGAAGATGAGGGAGCAGCAAAAGGAACAGAGGGAGCAAAAGGAAGAGAGAGACGCGC
 GGAAGAGAGGAGAAAAGAAAAGAGAAGCAAGACGCGAAGTGAAGTCCCATCACAGAACCATGCGGGAAGAT
 TACAGTGATAAAGTCAAGGCTTCCCCTGGTACGATCCCGCCAGGCCACCTAGGGAGCGGTTTCGAGC
 TGGGAGACGGGCGGAAGCCGGTTAAGGAAGAGAAAATGGAAGAACGAGATCTCCTTAGTGACCTGCAAGA
 TATATCTGACTCAGAGAGGAAAACCAAGCTCCCGGAGTCCAGTTCTGCCGAAAGCGGGTCCAGTACAG
 GAAGAGGAAGAGGAGGAGGAGGAGGAGGAAGAGGGCTCTACAAGCGAGGAGAGCGAAGAGGAAGAGG
 AGGAGGAGGAGGAAGAAGAGGAGGAAAAGTGGTTCTAATTCAGAGGAGGCTTCAGAGCAGTCCGCTGAAGA
 GGTGTCCGAAGAGGAGATGTCTGAGGATGAAGAACGGGAGAACGAGAATCACCTCCTGGTGGTGCCAGAA
 TCCCGGTTTCGATAGAGACAGTGGTGAAGCGAGGAGGCCGAGGAGGAAGTCGGCGAGGGTACTCCCCAAT
 CCTCTGCCTTGACTGAAGGGGACTACGTCCCCGATTCCCCTGCTCTTCCCCCATCGAGTTGAAGCAGGA
 GCTCCCCAAGTATCTGCCAGCCCTTCAGGGCTGCAGAAGTGTGGAGGAGTTTCAATGTCTCAATCGGATA
 GAAGAAGGCACCTATGGCGTTGTGTACAGAGCCAAAGACAAGAAAACAGACGAAATCGTTGCCCTGAAGC
 GACTGAAAATGGAGAAGGAAAAGGAAGGGTTCCCAATTACGAGCCTCCGCGAGATTAACACCATATTGAA
 GGCCAGCATCCTAACATTGTTACAGTGAGGGAATAGTGGTGGGCTCCAACATGGACAAAATCTACATA
 GTTATGAATTATGTGGAGCACGACCTCAAGTCTCTGATGGAAAACATGAAGCAGCCTTTCCTGCCCGGGG
 AGGTGAAAACATTGATGATACAACCTTCTGAGAGGGGTCAAACATCTTCACGACAACCTGGATCCTGCATCG
 AGATCTGAAGACATCTAACCTTCTGCTGTCCCATGCTGGTATCCTGAAGGTGGGAGACTTTGGGCTCGCC
 AGAGAGTATGGCAGCCCACTGAAGGCATACACCCCGTTGTTGTGACCTTGTGGTACCGAGCACCTGAGT
 TGCTGCTTGGGGCGAAGGAGTATAGCACCGCGTGGACATGTGGAGCGTCGGCTGTATCTCGGCGAACT
 GGTGACCCAGAAGCCTTTGTTCCGGGAAAATCCGAAATCGATCAAATCAATAAGGTGTTAAAGACCTT
 AGCATCCATATAACAACCTCAGGAAACGATTCGGCGCACTCCTCTCAGATCAGGGCTTCGACTTGATGAA
 TAAGTTTTTGACCTATTTCCCGGACGCGGAATCTCTGCGGAAGATGGACTGAAGCATGAGTACTTCCGG
 GAGACACCATTGCCATCGATCCAGTATGTTCCCGACCTGGCCGGCAAAATCTGAACAGCAGAGGGTGA
 AGCGAGGTACCAGTCTAGACCCCTGAAGGGGACTTGGTTACAGCCAGCTGGGAGATGACGACCTCAA
 GGAGACAGGTTTCCACCTGACAACCTACCAACCAGGGCGCTTCAGCCGCCGGGCCAGGTTTAGCTTGAAG
 TTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – **GTTTAA**

Protein Sequence: >RG222810 representing NM_033493
 Red=Cloning site Green=Tags(s)

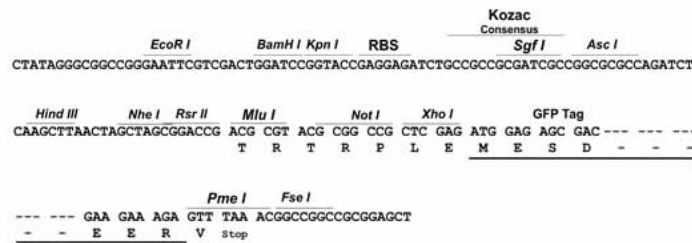
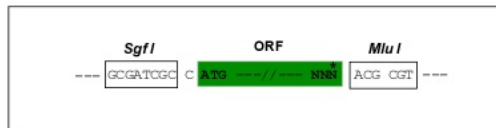
MGDEKDSWKVKTLDLDEILQEKKRRKEQEEKAEIKRLKNSDDRDSKRDSLEEGELRDHCMEITIRNSPYRRE
 DSMEDRGEEDSLAIKPPQMSRKEKVHHRKDEKRKEKKHARVKEKEREHERRKRHREEQDKARREWERQ
 KRREMAREHSRRERDRLEQLERKRERERKMREQKEQREQERERRAEERRKEREARREVSAAHRTMRED
 YSDKVKASHWSRSPRPFRERFELGDGRKPVKEEKMEERDLLSDLQDISDSERKTSSEAESSAESGSGSE
 EEEEEEEEEEGSTSEEEEEEEEEEEEEETGSNSEEASEQSAEEVSEEMSEDEERENENHLLVYPE
 SRFDRDSGESEEAEEVGEVTPQSSALTEGDYVPDSPALESPIELKQELPKYLPALQGCRSVEEFQCLNRI
 EEGTYGVYRAKDKKTDEIVALKRLKMEKEKEGFPITSLREINTILKAQHPNIVTVREIVVGSNMDKIYI
 VMNYVEHDLKSLMETMKQFPLPGEVKTLMIQLLRGVKHLHDNWLHRDLKTSNLLL SHAGILKVGDFGLA
 REYGSPLKAYTPVVVTLWYRAPELLLGAKEYSTAVDMWSVGCIFGELLTQKPLFPGKSEIDQINKVFKDL
 GTPSEKIWPGYSELPAVKKMTFSEHPYNNLRKRF GALLSDQGFDMNKFLTYFPGRRISAEDGLKHEYFR
 ETPLPIDPSMFPTWPAKSEQQRVKGRTSPRPPEGLGYSQLGDDDLKETGFHLTTTNQGASAAGPGFLK
 F

TRTRPLE - GFP Tag - V

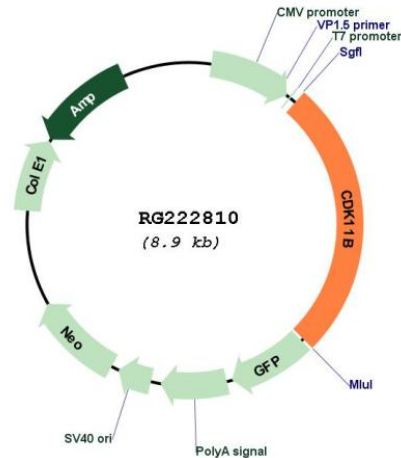
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_033493

ORF Size: 2313 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_033493.1](#), [NP_277028.1](#)

RefSeq Size: 2453 bp

RefSeq ORF: 2315 bp

Locus ID: 984

Cytogenetics: 1p36.33

Protein Families: Druggable Genome, Transcription Factors

Gene Summary:

This gene encodes a member of the serine/threonine protein kinase family. Members of this kinase family are known to be essential for eukaryotic cell cycle control. Due to a segmental duplication, this gene shares very high sequence identity with a neighboring gene. These two genes are frequently deleted or altered in neuroblastoma. The protein kinase encoded by this gene can be cleaved by caspases and may play a role in cell apoptosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]