

Product datasheet for **MG218219**

Cdk8 (NM_153599) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdk8 (NM_153599) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cdk8
Synonyms:	MGC37111
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG218219 representing NM_153599
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTATGACTTTAAAGTGAAGCTGAGCAGCGAGCGGGAGCGGGTTCGAGGACCTGTTGAATACGAGG
 GCTGCAAAGTTGGTCGAGGCACCTACGGGCACGCTACAAGCGAAGAGGAAAGATGGGAAGGACGATAA
 AGACTACGCTTTAAAAACAAATAGAAGGAACTGGAATTTCTATGTCGCGCATGCAGAGAGATAGCATTACTC
 CGAGAGCTTAAGCACCCAAACGTCATCTCCCTTCTGAAGGTGTTTCTGTCTCATGCTGATCGAAAGTAT
 GGCTTCTCTTTGACTATGCTGAGCATGACCTCTGGCATAAATTAAGTTTCACAGAGCTTCGAAAGCCAA
 CAAGAAGCCAGTTCAGTTACCTCGGGGAATGGTGAAGTCACTGTTGTACCAGATCCTAGATGGGATTCAC
 TATCTTCATGCCAACTGGGTGTTGCACAGGGATTTGAAACCTGCTAATATTTTAGTTATGGGTGAAGGTC
 CTGAGCGAGGAAGAGTAAAAATTGCTGACATGGGCTTTGCCGATTATTTAATTCACCTTTGAAGCCTTT
 AGCAGATTTGGATCCAGTGGTGTAAACATTCTGGTACCGAGCTCCAGAATTACTCCTCGGAGCGCGACAT
 TATACCAAAGCAATTGATATTTGGGCTATAGGGGTATATTTGCAGAAGCTACTAACGTCAGAACCAATAT
 TTCCTGTGACAAGAGGACATCAAACTAGTAATCCTTATCACCATGACCAGCTGGACAGAATATTTCAA
 TGTAATGGGATTCCTGCAGATAAAGATTGGGAAGATATAAAAAAGATGCCCGAACATTCACATTAATG
 AAAGATTTCAGAAGAAATACGTATACCAATTGCAGCCTTATCAAGTATATGGAAAAGCATAAAGTTAAAC
 CCGATAGTAAAGCATTCCACTTGCTTCAAGAGTTGCTCACTATGGACCAATAAAGCGAATTACCTCAGA
 GCAGGCCATGCAGGACCCTACTTCTAGAAGACCCACTCCACAGTCAAGATGTTTTCGCCGGTTGTCAG
 ATCCCATATCCCAAACGAGAATTTTAAACAGAAGAAGAGCCTGATGAGAAAAGGAGACAAAAGACCCAGC
 AGCAGCAGCAGGGCAACAACCACTAACGGAAGTGGCCATCCGGGGAACCAGGACAGCGCCACGCACA
 GGGGCCCCCTTGAAAAAAGTGAGAGTTGTCCTCCTACCCTACCTCAGGTGGACTCATCATGACTCCTC
 GACTATCAGCGTTCCAATCCACATGCTGCTTATCCCAACCCTGGACCAAGCACATCACAGCCCCAGAGCA
 GCATGGGATACTCAGCTACCTCCAGCAGCCTCCACAGTACTCACATCAGACACATCGGTAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG218219 representing NM_153599
 Red=Cloning site Green=Tags(s)

MDYDFKVKLSSSERERVELDFEYEGCKVGRGTYGHVYKAKRKDGKDDKDYALKQIEGTGISMSACREIAL
 RELKHPNVISLLKVFLSHADRVWLLFDYAEHDLWHIIKFHRASKANKKPVLPRGMVKSLLYQILDGIIH
 YLHANVWLHRDLKPANILVMGEGPERGRVKIADMGFARLFNSPLKPLADLDPVVVTFWYRAPELLLGARH
 YTKAIDIWAIGCIFAELLTSEPIFHCRQEDIKTSNPYHHDQLDRIFNVMGFADKDWEDIKKMPHSTLM
 KDFRRNTYTNCSLIKYMEKHKVKPDSKAFHLLQKLLTMDPIKRITSEQAMQDPYFLEDPLPTSDVFAGCQ
 IPYPKREFLTEEEPDEKGDKKTQQQQGNHNTGTGHPGNQDSGHAQGPPLKKVRVVPPTTSSGGLIMTS
 DYQRSNPHAAYPNPSTSQPQSSMGYSATSQQPPQYSHQTHRY

TRTRPLE – GFP Tag – V

Restriction Sites:

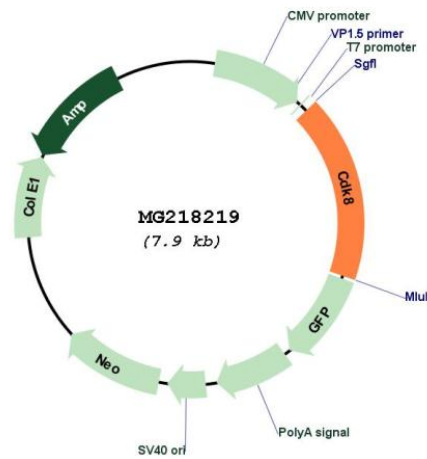
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_153599

ORF Size: 1392 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_153599.4](#)

RefSeq Size: 2586 bp

RefSeq ORF: 1395 bp

Locus ID: 264064

UniProt ID: [Q8R3L8](#)

Cytogenetics: 5 G3

Gene Summary:

Component of the Mediator complex, a coactivator involved in regulated gene transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors. Phosphorylates the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNAP II), which may inhibit the formation of a transcription initiation complex. Phosphorylates CCNH leading to down-regulation of the TFIIF complex and transcriptional repression. Recruited through interaction with MAML1 to hyperphosphorylate the intracellular domain of NOTCH, leading to its degradation (By similarity).[UniProtKB/Swiss-Prot Function]