OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR218603

Cdk12 (NM_001109626) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdk12 (NM_001109626) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdk12
Synonyms:	1810022J16Rik; AI646528; Crk7; Crkrs; D11Ertd752e; Pksc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR218603 representing NM_001109626
Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCCC

ATGCCCAATTCCGAGAGACATGGGGGCAAGAAGGACGGGAGCGGAGGAGCTTCTGGAACTTCGCAGCCGT
CATCGGGAGGTGGCAGCTCCAACAGCAGGGAGCGTCACCGCTTGGTGTCGAAGCACAAGCGGCATAAGTC
CAAGCACTCCAAAGACGTGGGGCTGGTGACCCCCGAAGCGGCATCTTTGGGTACCATAATCAAACCACTG
GTGGAGTACGATGACATCAGCTCTGATTCAGACACCTTCTCCGATGACACGGCCTTCAAATCAGACCGGA
GGGAGAACGAGGAACGTCGGGGAACGGATCGGAGCGATCGCCTGCACCGACATCGTCACCACCAGCACCG
GCGGTCCCGAGACTTGCTAAAAACTAAACAGACGGAAAAGGAAAAAAATCAGGAAGTCTCCAAATCTGGA
TCTATGAAGGACCGGGTATCGGGCAGTTCCAAACGG[AT]CCGTGGAGGGGAGTGATGATTATGGGAAGG
CCCAGCTATCCAAAAGCGGCAGCAAGGAATCCAGGTCGTCCAAAATGCACAAGGAGAAGACCCGCAAAGA
GCGAGAGTTAAAGTCTGGATACAAGGACCGGAGTAAAAGTCATCGGAAAAGGGAAACACCCAAAAGTTAC
AAAACCGTGGCTAGCCCTAAACGGAGATCCAGGAGTCCCCATAGGAAATGGTCTGACAGTTCCAAGCAAG
ATGACAGCCCTTCCGGAGCTTCTTATGGCCAAGACTACGATCTTAGCCCCCCAAGGTCTCACACTTCTAG
CAACTATGACTCCTACAAGAAGAGTCCTGGAAGTACCTCAAGAAGGCAGTCAATCAGCCCACCTTACAAA
GAGCCTTCTGCTTACCAGTCCAGCACTCGGTCACCCAGTCCTTACAGCCGACGACAGAGGTCTGTGAGTC
CCTATAGCCGGAGACGGTCCTCCAGCTATGAAAGGAGCGGCTCTTACAGCGGGAGATCACCCAGCCCCTA
TGGCCGAAGGCGATCAAGCAGCCCTTTCCTGAGCAAGAGGTCTCTGAGTCGGAGTCCACTCCCCAGTAGG
AAATCCATGAAGTCCAGAAGTAGAAGTCCTGCATATTCAAGACACTCATCTTCTCATAGTAAAAAGAAGC
GATCCGGGTCACGCAGTCGTCATTCCAGTATCTCACCTGTCAGGCTTCCATTGAATTCCAGCCTGGGAGC
TGAACTCAGTAGAAAAAAGAAGGAAAGAGCAGCAGCTGCTGCAGCAGCAAAAATGGATGGAAAAGAGTCC
AAGAGTTCACCTATAATTTTGCCTAAAAAAGAGAAACTTGAGGTGAAGGAGTCAGGGTTAGAGTCTAAAA
AGTTACCCAGAAGTATAAAATCAGAAAAATCGACCCCAGATACTGAACTGGTTACTGTAGCACATTCAAA
CCCAGAGGTAAAACATTGTTTAGACACAGGGAAGGTTAGGTTGGATGAGAACTTGCAGAAGCATCCTGCT

View online »

AAGGATTTGAAAGCACAGGGAACAAAGGACGTTAAACCTGTAGCACCGAAAGAGGTGATTGTTACTTCAA
AGGAGACAGAGACATCAGAAAAGGAGACCCTTCCACCTCTTCCCACAATTACTTCTCCACCCCCTTTACC
AGCTACTACCCCTCCACCTCAGACACCCCCTTTGCCACCTTTGCCTCCACTACCAGCTATTCCGCTGCAG
CCACCTCTGCCTCCTCCCCAACCACCATTTAGTCAAGTTCCTGTTTCAAGTACTTCAATTTTACCCTCTT
CTCCTCACCCAAGGACATCTACTCTATCCTCTCAGACAAATTCTCAGCCCCCTGTACAGGTTTCTATGAA
GACTCAAGTATCTATAACAGCTGCTATTCCACATCTGAAGACTTCAACATTGCCTCCTCTGCCCCTCCCT
CCCCTATTACCTGGAGATGATGACATGGATAGTCCAAAAGAAACACTTCCTTCAAAGCCTGCAAAGAAAG
AGAAGGAACAGAGGACTCGCCACTTGCTTACAGACTTGCCTCTTCCTCCTGAGCTACCAGGAGGAGATCC
ATCGCCTCCAGATTCTCCAGAGCCAAAGGCAATTACACCACCTCAACAACCATATAAAAAGAGACCAAAA
ATTTGTTGTCCACGTTATGGAGAAAGAAGACAAACAGAAAGTGATTGGGGGAAGCGCTGTGTGGACAAGT
TTGACATTATTGGGATTATTGGAGAGGGGACCTATGGCCAAGTATATAAAGCCAAGGACAAAGACACAGG
AGAACTAGTAGCTCTGAAGAAGGTTCGGCTGGACAATGAGAAAGAGGGCTTCCCAATCACAGCCATCCGG
GAGATCAAGATTCTTCGTCAATTAGTTCACCAGAGTGTTGTAAACATGAAGGAAATTGTCACAGACAAAC
AAGATGCACTGGATTTCAAGAAGGACAAAGGTGCCTTTTACCTTGTATTTGAATATATGGACCATGACTT
AATGGGACTGCTTGAATCAGGTTTGGTGCACTTTTCTGAGGACCATATCAAGTCATTTATGAAACAGCTA
ATGGAAGGACTGGATTACTGTCACAAAAAGAATTTCCTCCATCGGGATATTAAATGTTCTAACATTTTGC
TGAATAACAGCGGGCAAATCAAACTGGCAGATTTTGGACTTGCTCGGCTCTATAACTCTGAAGAGAGTCG
CCCTTACACAAACAAAGTCATCACTCTTTGGTATCGACCTCCAGAGCTTCTTCTTGGAGAGGAAAGATAC
ACACCAGCCATTGATGTTTGGAGCTGTGGGTGCATCCTTGGAGAACTGTTCACAAAGAAACCTATTTTTC
AAGCCAATTTAGAACTGGCTCAGCTAGAACTTATCAGTCGTCTCTGTGGTAGTCCTTGTCCAGCAGTGTG
GCCTGATGTTATCAAGCTGCCCTACTTCAACACCATGAAACCGAAGAAGCAATACAGGAGACGCCTAAGA
GAAGAATTCTCTTTCATTCCTTCAGCGGCACTTGATCTATTGGACCACATGCTGACACTGGATCCTAGCA
AGAGGTGCACAGCTGAACAGACCCTACAGAGTGACTTTCTTAAAGATGTGGAACTCAGCAAAATGGCACC
TCCAGACCTACCTCACTGGCAGGATTGCCATGAATTGTGGAGTAAGAAACGTCGACGGCAGCGACAGAGT
GGTATTGTGATAGAAGATCCACCTCCGTCCAAAGCTTCTAGAAAAGAAACTACCTCAGGGACAACAGCTG
AGCCTGTGAAAAACAATAGCCCAGCACCACCTCAGCCTGCTCCTGTCAAGGCAGAGCCTGGTCCAGGGGA
TGCAGTAGGCCTTGGTGACATCACACAGCAGTTGAATCAAAGTGAATTGGCAGTGTTATTAAACCTGCTT
CAGAGCCAAACTGACCTGAGCATCCCTCAGATGGCACAGCTGCTTAATATCCACTCCAATCCAGAGATGC
AACAGCAGCTTGAAGCCTTGAATCAGTCTATTAGTGCACTGACTGAAGCCAGTTCCCAGCAGCAGGACTC
AGAATCCATAGCCCCTGAAGAATCATTGAAGGAGGTACCTTCTGTACCTGTGGTCCTGCCTCCTGCTGAA
CAGACAACTCCTGAAGCTTCAAACACACCAGCTGACATGCAGAATGTGTTGGCAGTTCTCTTGAGTCAGC
TGATGAAAACCCAAGAGCCAGCAGGTAACCTGGAGGAAAACACCAATGACAAGAATAGTGGGCCACAGGG
GCCCCGAAGAACTCCTACAATGCCACAGGAGGAGGCAGCAGCATGTCCTCCTCACATTCTTCCACCAGAG
AAGAGGCCCCCTGAGCCCCCTGGACCTCCACCGCCGCCACCTCCACCCCCTCTGGTTGAAGGCGATCTTT
CCAGCGCCCCCCAGGAGTTGAATCCCGCCGTGACAGCCGCCTTGCTGCAACTTTTATCCCAGCCTGAAGC
AGAGCCTCCTGGCCACCTGCCACATGAGCACCAGGCCTTGAGACCAATGGAATACTCCACCCGATCCCAT
CCAAACAGGACTTACGGAAATACTGATGGGCCTGAGACAGGGTTCAGTTCCGCTGACACTGATGAACGCA
GTTCTGGTCCAGCCTTGACAGAATCTTTGGTTCAGACCCCGGTGAAGAACAGGACCTTCTCAGGCTCTGT
GAGCCACCTTGGGGAGTCCAACAGCTACCAGGGCACAGGGTCAGTGCAGTTCCCAGGGGACCAGGACCTC
CGTTTTACCAGGGTTCCCTTAGCATTACACTCAGTGGTTGGGCAACCATTCCTCAAGTCTGAGGGAAATA
GCAACTCTGTGGTACATGCAGAGACCAAATTGCAAAACTATGGGGAGCTGGGACCGGGAACCACTGGGGC
CAACAGCTCAGGAACAACGCTTCAGTGGGGGGGCCCAGCTCAGTCTTATGGAAAACCCTACAGGGGGGCT
GCAAGAGTCCTACCACGAGGGGGAAGAGGGAGAGGAGTTCCTTAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218603 representing NM_001109626
Red=Cloning site Green=Tags(s)

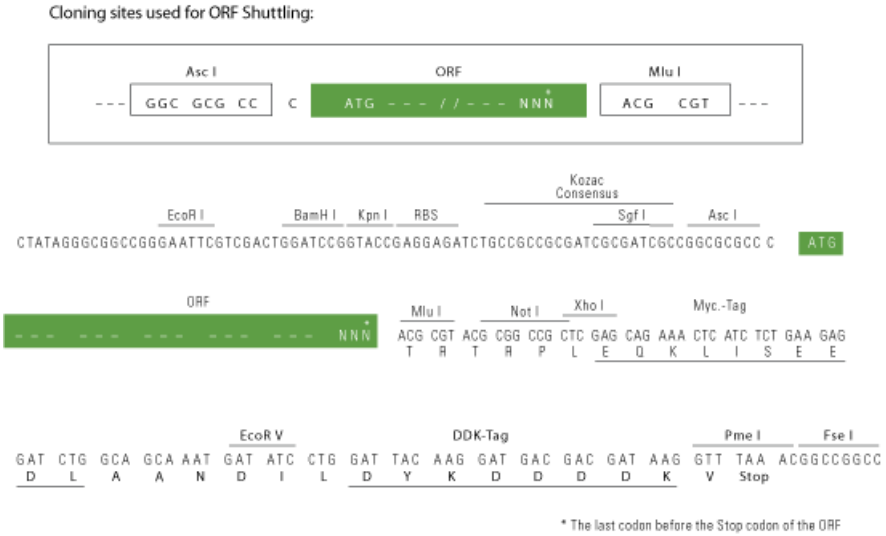
MPNSERHGGKKDGSGGASGTSQPSSGGGSSNSRERHRLVSKHKRHKSKHSKDVGLVTPEAASLGTIIKPL
VEYDDISSDSDTFSDDTAFKSDRRENEERRGTDRSDRLHRHRHHQHRRSRDLLKTKQTEKEKNQEVSKSG
SMKDRVSGSSKRXXVEGSDDYGKAQLSKSGSKESRSSKMHKEKTRKERELKSGYKDRSKSHRKRETPKSY
KTVASPKRRSRSPHRKWSDSSKQDDSPSGASYGQDYDLSPPRSHTSSNYDSYKKSPGSTSRRQSISPPYK
EPSAYQSSTRSPSPYSRRQRSVSPYSRRRSSSYERSGSYSGRSPSPYGRRRSSSPFLSKRSLSRSPLPSR
KSMKSRSRSPAYSRHSSSHSKKKRSGSRSRHSSISPVRLPLNSSLGAELSRKKKERAAAAAAAKMDGKES
KSSPIILPKKEKLEVKESGLESKKLPRSIKSEKSTPDTELVTVAHSNPEVKHCLDTGKVRLDENLQKHPA
KDLKAQGTKDVKPVAPKEVIVTSKETETSEKETLPPLPTITSPPPLPATTPPPQTPPLPPLPPLPAIPLQ
PPLPPPQPPFSQVPVSSTSILPSSPHPRTSTLSSQTNSQPPVQVSMKTQVSITAAIPHLKTSTLPPLPLP
PLLPGDDDMDSPKETLPSKPAKKEKEQRTRHLLTDLPLPPELPGGDPSPPDSPEPKAITPPQQPYKKRPK
ICCPRYGERRQTESDWGKRCVDKFDIIGIIGEGTYGQVYKAKDKDTGELVALKKVRLDNEKEGFPITAIR
EIKILRQLVHQSVVNMKEIVTDKQDALDFKKDKGAFYLVFEYMDHDLMGLLESGLVHFSEDHIKSFMKQL
MEGLDYCHKKNFLHRDIKCSNILLNNSGQIKLADFGLARLYNSEESRPYTNKVITLWYRPPELLLGEERY
TPAIDVWSCGCILGELFTKKPIFQANLELAQLELISRLCGSPCPAVWPDVIKLPYFNTMKPKKQYRRRLR
EEFSFIPSAALDLLDHMLTLDPSKRCTAEQTLQSDFLKDVELSKMAPPDLPHWQDCHELWSKKRRRQRQS
GIVIEDPPPSKASRKETTSGTTAEPVKNNSPAPPQPAPVKAEPGPGDAVGLGDITQQLNQSELAVLLNLL
QSQTDLSIPQMAQLLNIHSNPEMQQQLEALNQSISALTEASSQQQDSESIAPEESLKEVPSVPVVLPPAE
QTTPEASNTPADMQNVLAVLLSQLMKTQEPAGNLEENTNDKNSGPQGPRRTPTMPQEEAAACPPHILPPE
KRPPEPPGPPPPPPPPPLVEGDLSSAPQELNPAVTAALLQLLSQPEAEPPGHLPHEHQALRPMEYSTRSH
PNRTYGNTDGPETGFSSADTDERSSGPALTESLVQTPVKNRTFSGSVSHLGESNSYQGTGSVQFPGDQDL
RFTRVPLALHSVVGQPFLKSEGNSNSVVHAETKLQNYGELGPGTTGANSSGTTLQWGGPAQSYGKPYRGA
ARVLPRGGRGRGVPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9008_h02.zip

Restriction Sites: AscI-MluI

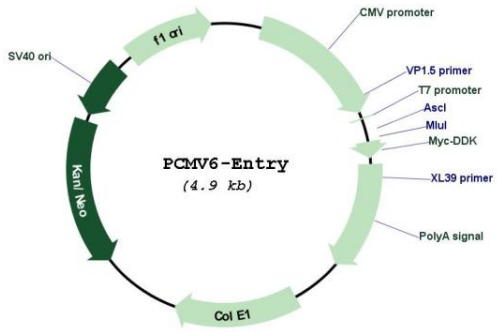
Cloning Scheme:



ACCN: NM_001109626

ORF Size:	4455 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_001109626.1, NP_001103096.1
RefSeq Size:	7669 bp
RefSeq ORF:	4455 bp
Locus ID:	69131
UniProt ID:	Q14AX6
Cytogenetics:	11 61.75 cM
MW:	164.1 kDa
Gene Summary:	Cyclin-dependent kinase that phosphorylates the C-terminal domain (CTD) of the large subunit of RNA polymerase II (POLR2A), thereby acting as a key regulator of transcription elongation. Regulates the expression of genes involved in DNA repair and is required for the maintenance of genomic stability. Preferentially phosphorylates 'Ser-5' in CTD repeats that are already phosphorylated at 'Ser-7', but can also phosphorylate 'Ser-2'. Required for RNA splicing, possibly by phosphorylating SRSF1/SF2. Involved in regulation of MAP kinase activity, possibly leading to affect the response to estrogen inhibitors.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218603