

Product datasheet for **MC224546**

Cdk12 (NM_001109626) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cdk12 (NM_001109626) Mouse Untagged Clone
Tag: Tag Free
Symbol: Cdk12
Synonyms: 1810022J16Rik; A1646528; Crk7; Crkrs; D11Ert752e; Pksc
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224546 representing NM_001109626
 Red=Cloning site Blue=ORF Orange=Stop codon

CTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCC

ATGCCAATTCGAGAGACATGGGGCAAGAAGGACGGGAGCGGAGGAGCTTCTGGAACCTCGCAGCCGT
CATCGGGAGGTGGCAGCTCCAACAGCAGGGAGCGTCACCGCTTGGTGTGCAAGCACAAGCGGCATAAGTC
CAAGCACTCCAAAGACGTGGGGCTGGTGACCCCGAAGCGGCATCTTTGGGTACCATAATCAAACCACTG
GTGGAGTACGATGACATCAGCTCTGATTGACACACCTTCTCCGATGACACGGCCTTCAAATCAGACCCGGA
GGGAGAACGAGGAACGTGGGGAAACGGATCGGAGCGATCGCCTGCACCGACATCGTCACCACCAGCACCG
GCGGTCCCAGACTTGCTAAAACTAAACAGACGGAAAAGGAAAAAATCAGGAAGTCTCCAAATCTGGA
TCTATGAAGGACCGGGTATCGGGCAGTTCCAAACGGTCCGTGGAGGGGAGTGATGATTAAGGAAAGGCC
AGCTATCCAAAGCGGCAGCAAGGAATCCAGGTCGTCCAAATGCACAAGGAGAAGACCCGAAAGAGCG
AGAGTTAAAGTCTGGATAACAAGGACCGGAGTAAAAGTATCGGAAAAGGGAAACCCAAAAGTTACAAA
ACCGTGGTAGCCCTAACCGGAGATCCAGGAGTCCCATAGGAAATGGTCTGACAGTTCACAAGCAAGATG
ACAGCCCTTCGGAGCTTCTTATGGCCAAGACTACGATCTTAGCCCCCAAGGTCTCACACTTCTAGCAA
CTATGACTCTACAAGAAGAGTCTGGAAGTACCTCAAGAAGGCAGTCAATCAGCCACCTTACAAGAG
CCTTCTGCTTACCAGTCCAGCACTCGGTACCCAGTCCTTACAGCCGACGACAGAGGTCTGTGAGTCCCT
ATAGCCGGAGACGGTCTCCAGCTATGAAAGGAGCGGCTTACAGCGGGAGATCACCCAGCCCTATGG
CCGAAGGCGATCAAGCAGCCCTTCTGAGCAAGAGGTCTCTGAGTGGAGTCCACTCCCAGTAGGAAA
TCCATGAAGTCCAGAAGTAGAAGTCTGCATATCAAGACTCATCTTCTCATAGTAAAAAGAAGCGAT
CCGGGTACGCAGTCTGATTCAGTATCTCACCTGTGAGGCTTCCATTGAATCCAGCCTGGGAGCTGA
ACTCAGTAGAAAAAGAAGGAAAGAGCAGCAGCTGCTGCAGCAGCAAAAATGGATGGAAGAGTCCAAG
AGTTCACCTATAATTTTGCCTAAAAAGAGAACTTGAGGTGAAGGAGTCAAGGTTAGAGTCAAAAAGT
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AGAGGTAACATTTGTTAGACACAGGGAAGGTTAGGTTGGATGAGAAGTTCAGAAAGCATCCTGCTAAG
GATTTGAAAGCACAGGGAACAAAGGACGTTAAACCTGTAGCACCGAAAGAGGTGATTGTTACTTCAAAGG



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AGACAGAGACATCAGAAAAGGAGACCCTTCCACCTCTTCCCACAATTACTTCTCCACCCCTTTACCAGC
TACTACCCCTCCACCTCAGACACCCCTTTGCCACCTTTGCCTCCACTACCAGCTATTCCGCTGCAGCCA
CCTCTGCCTCCTCCCAACCACCATTTAGTCAAGTTCTGTTCCTGTTCAAGTACTTCAATTTTACCCTCTTCTC
CTCACCAAGGACATCTACTCTATCCTCTCAGACAAATTTCTCAGCCCCCTGTACAGGTTTCTATGAAGAC
TCAAGTATCTATAACAGCTGCTATTCCACATCTGAAGACTTCAACATTGCCTCCTCTGCCCTCCCTCCC
CTATTACCTGGAGATGATGACATGGATAGTCCAAAAGAAACACTTCCTTCAAAGCCTGCAAAGAAAGAGA
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GCCTCCAGATTCTCCAGAGCCAAAGGCAATTACACCACCTCAACAACCATATAAAAAGAGACAAAAAATT
TGTTGTCCACGTTATGGAGAAAAGACAAACAGAAAGTGATTGGGGGAAGCGCTGTGTGGACAAGTTTG
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GGGACTGCTTGAATCAGGTTTGGTGCATTTTCTGAGGACCATATCAAGTCATTTATGAAACAGCTAATG
GAAGGACTGGATTACTGTCACAAAAGAATTTCTCCATCGGGATATTAATGTTCTAACATTTTGTCTGA
ATAACAGCGGGCAAATCAAAGTGCAGATTTTGGACTTGTCTGGCTCTATAACTGAAAGAGAGTCGCC
TTACACAAAACAAAGTCATCACTCTTTGGTATCGACCTCCAGAGCTTCTTCTGGAGAGGAAAGATACACA
CCAGCCATTGATGTTTGGAGCTGTGGGTGCATCCTTGGAGAACTGTTACAAAAGAAACCTATTTTCAAG
CCAATTTAGAAGTGGCTCAGCTAGAAGTATCAGTCGCTCTGTGGTAGTCTTGTCCAGCAGTGTGGCC
TGATGTTATCAAGCTGCCTACTTCAACACCATGAAACCGAAGAAGCAATACAGGAGACGCTAAGAGAA
GAATTCCTTTTCAATCCTTCCAGCGGCCTTGCATCTATTGGACCACATGCTGACTGATCTTAGCAAGA
GGTGCACAGCTGAACAGACCCTACAGAGTACTTTCTTAAAGATGTGAACTCAGCAAAAATGGCACCTCC
AGACTACTCTGAGGACTGATGCAATGAAATTTGGAGTAAGAAACGTCGACGGCAGCAGAGAGTGGT
ATTGTGATAGAAGATCCACCTCCGTCCAAAGCTTCTAGAAAAGAACTACCTCAGGGACAACAGCTGAGC
CTGTGAAAAACAATAGCCAGCACACCTCAGCCTGCTCCTGTCAAGGCAGAGCCTGGTCCAGGGATGC
AGTAGGCCCTTGGTGACATCACACAGCAGTTGAATCAAAGTGAATGGCAGTGTATTAAACCTGCTTCAG
AGCCAAACTGACCTGAGCATCCCTCAGATGGCACAGCTGCTTAATATCCACTCCAATCCAGAGATGCAAC
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ATCCATAGCCCTGAAGAATCATTGAAGGAGGTACCTTCTGTACCTGTGGTCTGCCTCCTGCTGAACAG
ACAACCTCTGAAGCTTCAAACACACCAGCTGACATGCAGAATGTGTTGGCAGTCTCTTGTAGTCACTGA
TGAAAACCAAGAGCCAGCAGGTAACTGGAGGAAAACCAATGACAAGATAGTGGGCCACAGGGGCC
CCGAAGAACTCCTACAATGCCACAGGAGGAGGCAGCAGCATGTCTCCTCACATTTCCACCAGAGAAG
AGGCCCTTGGACCCCTGGACCTCCACCGCCGACCTCCACCCCTCTGGTTGAAGGCGATCTTTCCA
GCGCCCCCAGGAGTTGAATCCCGCCGTGACAGCCGCTTGTGCAACTTTATCCAGCCTGAAGCAGA
GCCTCCTGGCCACCTGCCACATGAGCACCAGGCCTTGGAGCAATGGAATACTCCACCCGATCCCATCCA
AACAGGACTTACGGAAATACTGATGGCCCTGAGACAGGGTTCAAGTCCGCTGACTGATGAACGAGTT
CTGGTCCAGCCTTGAAGCAATCTTTGGTTCAGACCCCGGTGAAGAACAGGACCTTCTCAGGCTCTGTGAG
CCACCTTGGGGAGTCCAACAGCTACCAGGGCACAGGGTCAAGTGCAGTCCCAGGGGACCAGGACCTCCGT
TTTACCAGGGTTCCCTTAGCATTACACTCAGTGGTTGGGCAACCATTCCTCAAGTCTGAGGGAAATAGCA
ACTCTGTGGTACATGCAGAGACCAAATGCAAACTATGGGGAGCTGGGACCGGGAACACTGGGGCCAA
CAGCTCAGGAACAACGCTTCAAGTGGGGGGCCAGCTCAGTCTTATGAAAACCTACAGGGGGGCTGCA
AGAGTCTACCACGAGGGGAAGAGGGAGAGGAGTTCTTATTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Ascl-MluI
ACCN: NM_001109626
Insert Size: 4455 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	<u>NM_001109626.1</u> , <u>NP_001103096.1</u>
RefSeq Size:	7669 bp
RefSeq ORF:	4455 bp
Locus ID:	69131
UniProt ID:	<u>Q14AX6</u>
Cytogenetics:	11 61.75 cM
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]