

## Product datasheet for **MC224531**

### Cdk12 (NM\_001109628) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cdk12 (NM\_001109628) 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:** >MC224531 representing NM\_001109628  
Red=Cloning site Blue=ORF Orange=Stop codon

CTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
GCC

ATGCCAATTCGAGAGACATGGGGCAAGAAGGACGGGAGCGGAGGAGCTTCTGGAACCTCGCAGCCGT  
CATCGGGAGGTGGCAGCTCCAACAGCAGGGAGCGTCACCGCTTGGTGTGCAAGCACAAGCGGCATAAGTC  
CAAGCACTCCAAAGACGTGGGGCTGGTGACCCCGAAGCGGCATCTTTGGGTACCATAATCAAACCACTG  
GTGGAGTACGATGACATCAGCTCTGATTGACACACCTTCTCCGATGACACGGCCTTCAAATCAGACCCGGA  
GGGAGAACGAGGAACGTGGGGAACGGATCGGAGCGATCGCCTGCACCGACATCGTCACCACCAGCACCG  
GCGGTCCCAGACTTGCTAAAACTAAACAGACGGAAAAGGAAAAAATCAGGAAGTCTCCAAATCTGGA  
TCTATGAAGGACCGGTATCGGGCAGTTCAAAACGGTCCGTGGAGGGGAGTGATGATTATGGGAAGGCC  
AGCTATCCAAAAGCGGCAGCAAGGAATCCAGGTCGTCCAAAATGCACAAGGAGAAGACCCGAAAAGAGCG  
AGAGTTAAAGTCTGGATAACAAGGACCGGAGTAAAAGTATCGGAAAAGGGAAACCCAAAAGTTACAAA  
ACCGTGGTAGCCCTAACCGGAGATCCAGGAGTCCCATAGGAAATGGTCTGACAGTTCACAAGCAAGATG  
ACAGCCCTTCGGAGCTTCTTATGGCCAAGACTACGATCTTAGCCCCCAAGGTCACACTTCTAGCAA  
CTATGACTCCTACAAGAAGAGTCTGGAAGTACCTCAAGAAGGCAGTCAATCAGCCACCTTACAAGAG  
CCTTCTGCTTACCAGTCCAGCACTCGGTACCCAGTCCTTACAGCCGACGACAGAGGTCTGTGAGTCCCT  
ATAGCCGGAGACGGTCTCCAGCTATGAAAGGAGCGGCTTACAGCGGGAGATCACCCAGCCCCTATGG  
CCGAAGGCGATCAAGCAGCCCTTCTGAGCAAGAGGTCTCTGAGTGGAGTCCACTCCCAGTAGGAAA  
TCCATGAAGTCCAGAAGTAGAAGTCTGCATATCAAGACTCATCTTCTCATAGTAAAAAGAAGCGAT  
CCGGGTACGCAGTCTGATTCCAGTATCTCACCTGTGAGGCTTCCATTGAATCCAGCCTGGGAGCTGA  
ACTCAGTAGAAAAAGAAGGAAAGAGCAGCAGCTGCTGCAGCAGCAAAAATGGATGAAAAAGAGTCCAAG  
AGTTCACCTATAATTTTGCCTAAAAAGAGAACTTGAGGTGAAGGAGTCAAGGTTAGAGTCAAAAAGT  
TACCCAGAAGTATAAAATCAGAAAAATCGACCCAGATACTGAACTGGTTACTGTAGCACATTCAAACCC  
AGAGGTA AACATTGTTTAGACACAGGGAAGGTTAGGTTGGATGAGA ACTTGCAAGATCCTGCTAAG  
GATTTGAAAGCACAGGGAACAAAGGACGTTAAACCTGTAGCACCGAAAGAGGTGATTGTTACTTCAAAGG



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AGACAGAGACATCAGAAAAGGAGACCCTTCCACCTCTTCCCACAATTACTTCTCCACCCCTTTACCAGC  
TACTACCCCTCCACCTCAGACACCCCTTTGCCACCTTTGCCTCCACTACCAGCTATTCCGCTGCAGCCA  
CCTCTGCCTCCTCCCAACCACCATTTAGTCAAGTTCTGTTCCTGTTTCAAGTACTTCAATTTTACCCTCTTCTC  
CTCACCAAGGACATCTACTCTATCCTCTCAGACAAATTTCTCAGCCCCCTGTACAGGTTTCTATGAAGAC  
TCAAGTATCTATAACAGCTGCTATTCCACATCTGAAGACTTCAACATTGCCTCCTCTGCCCTCCCTCCC  
CTATTACCTGGAGATGATGACATGGATAGTCCAAAAGAAACACTTCTTCAAAGCCTGCAAAAGAAAGAGA  
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GCCTCCAGATTCTCCAGAGCCAAAAGGCAATTACACCACCTCAACAACCATATAAAAAGAGACCAAAAATT  
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ATCAAGATTCTTCGTCATTTAGTTCACCAGAGTGTGTAACATGAAGGAAATGTCACAGACAAACAAG  
ATGCACCTGGATTTCAAGAAGGACAAAGGTGCCTTTTACCTTGTATTTGAATATATGGACCATGACTTAAT  
GGGACTGCTTGAATCAGGTTTGGTGCATTTTCTGAGGACCATATCAAGTCATTTATGAAACAGCTAATG  
GAAGGACTGGATTACTGTCACAAAAGAATTTCTCCATCGGGATATTAATGTTCTAACATTTTGTCTGA  
ATAACAGCGGGCAAACTAAACTGGCAGATTTTGGACTTGTCTGGCTCTATAACTGAAAGAGAGTCGCC  
TTACACAAAACAAAGTCATCACTCTTTGGTATCGACCTCCAGAGCTTCTTCTGGAGAGGAAAGATACACA  
CCAGCCATTGATGTTTGGAGCTGTGGGTGCATCCTTGGAGAAGTGTTCACAAAAGAAACCTATTTTCAAG  
CCAATTTAGAAGTGGCTCAGCTAGAAGTATCAGTCGCTCTGTGGTAGTCTTGTCCAGCAGTGTGGCC  
TGATGTTATCAAGCTGCCTACTTCAACACCATGAAACCGAAGAAGCAATACAGGAGACGCTAAGAGAA  
GAATTCCTTTTCAATCCTTCAGCGGCACCTGATCTATTGGACCACATGCTGACACTGGATCTTAGCAAGA  
GGTGCACAGCTGAACAGACCCTACAGAGTACTTCTTAAAGATGTGAACTCAGCAAAAATGGCACCTCC  
AGACTACTCTGAGGACTGGCAGGATGGCATGAATTTGGAGTAAGAAACGTCGACGGCAGCAGAGATGGT  
ATTGTGATAGAAGATCCACCTCCGTCCAAAGCTTCTAGAAAAGAAACTACCTCAGGGACAACAGCTGAGC  
CTGTGAAAAACAATAGCCAGCACCACCTCAGCCTGCTCCTGTCAAGGCAGAGCCTGGTCCAGGGATGC  
AGTAGGCCCTTGGTACATCACACAGCAGTTGAATCAAAGTGAATGGCAGTGTATTAAACCTGCTTCAG  
AGCCAACTGACCTGAGCATCCCTCAGATGGCAGCAGCTGCTTAATATCCACTCCAATCCAGAGATGCAAC  
AGCAGCTTGAAGCCTTGAATCAGTCTATTAGTGCAGTACTGAAGCCAGTCCCAGCAGCAGGACTCAGA  
ATCCATAGCCCTGAAGAATCATTGAAGGAGGTACCTTCTGTACCTGTGGTCTGCCTCCTGCTGAACAG  
ACAACCTCTGAAGCTTCAAACACACCAGCTGACATGCAGAATGTGTTGGCAGTCTCTTGTAGTCAGCTGA  
TGAAAACCAAGAGCCAGCAGGTAACTGGAGGAAAACCAATGACAAGAATAGTGGGCCACAGGGGCC  
CCGAAAGAACTCCTACAATGCCACAGGAGGAGGCAGCAGAGAAGAGGCCCCCTGAGCCCCCTGGACCTCCA  
CCGCCGCCACCTCCACCCCTCTGGTTGAAGGCGATCTTCCAGCGCCCCCAGGAGTTGAATCCCGCCG  
TGACAGCCGCCTTGTGCAACTTTATCCCAGCCTGAAGCAGAGCCTCCTGGCCACCTGCCACATGAGCA  
CCAGGCCCTTGAAGCAATGGAATACTCCACCCGATCCCATCCAACAGGACTTACGGAAATACTGATGGG  
CCTGAGACAGGGTTCAGTCCGCTGACACTGATGAACGCAGTCTGGTCCAGCCTTACAGAACTTTTGG  
TTCAGACCCCGGTGAAGAACAGGACCTTCTCAGGCTCTGTGAGCCACCTTGGGGAGTCCAACAGCTACCA  
GGGCACAGGGTTCAGTGCAGTCCCAGGGGACCAGGACCTCCGTTTTACCAGGGTTCCTTAGCATTACAC  
TCAGTGGTTGGCAACCATTTCTCAAGTCTGAGGAAAATAGCAACTCTGTGGTACATGCAGAGACCAAT  
TGCAAAACTATGGGGAGCTGGGACCGGGAACCACTGGGGCCAACAGCTCAGGAACAACGTTTCAGTGGGG  
GGGCCAGCTCAGTCTTATGAAAACCTACAGGGGGCTGCAAGAGTCTACCACGAGGGGAAGAGGG  
AGAGGAGTTCCTTATAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Ascl-MluI  
ACCN: NM\_001109628  
Insert Size: 4428 bp

<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001109628.1</a></u> , <u><a href="#">NP_001103098.1</a></u>
<b>RefSeq Size:</b>	7642 bp
<b>RefSeq ORF:</b>	4428 bp
<b>Locus ID:</b>	69131
<b>UniProt ID:</b>	<u><a href="#">Q14AX6</a></u>
<b>Cytogenetics:</b>	11 61.75 cM
<b>Gene Summary:</b>	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]