

Product datasheet for MR215624

Cdk12 (NM_001109628) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdk12 (NM_001109628) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdk12
Synonyms:	1810022J16Rik; A1646528; Crk7; Crkrs; D11Ert752e; Pksc
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR215624 representing NM_001109628 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >MR215624 representing NM_001109628
Red=Cloning site Green=Tags(s)

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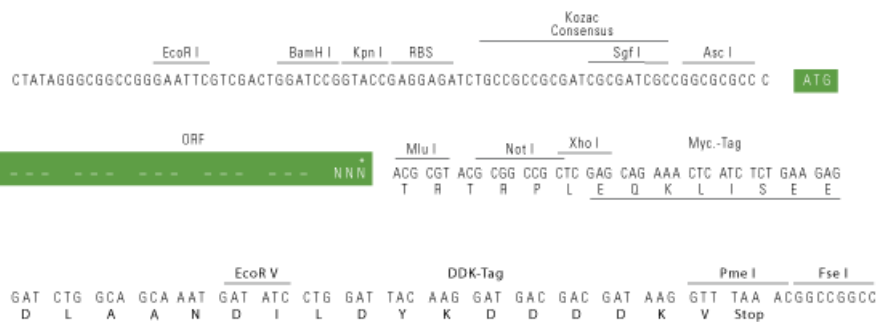
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Restriction Sites:

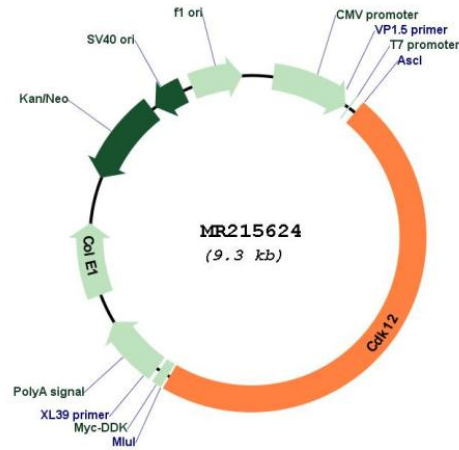
Cloning Scheme:

AscI-MluI

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001109628

ORF Size: 4425 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_001109628.1](#), [NP_001103098.1](#)

RefSeq Size: 7642 bp

RefSeq ORF: 4428 bp

Locus ID: 69131

UniProt ID: [Q14AX6](#)

Cytogenetics: 11 61.75 cM

MW: 163.2 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]