

Product datasheet for RC213898L1

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

CrkRS (CDK12) (NM_016507) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CrkRS (CDK12) (NM_016507) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: CrkRS

Synonyms: CRK7; CRKR; CRKRS

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide

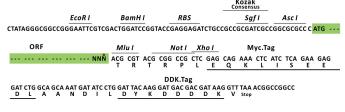
The ORF insert of this clone is exactly the same as(RC213898).

Sequence:

Restriction Sites: Ascl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_016507

ORF Size: 4470 bp





CrkRS (CDK12) (NM_016507) Human Tagged Lenti ORF Clone - RC213898L1

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: <u>NM 016507.1</u>

 RefSeq Size:
 5515 bp

 RefSeq ORF:
 4473 bp

 Locus ID:
 51755

 UniProt ID:
 Q9NYV4

Cytogenetics: 17q12

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

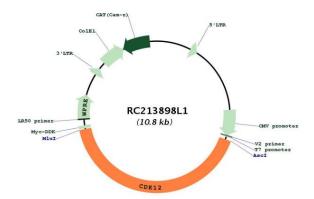
MW: 164.2 kDa

Gene Summary: Cyclin-dependent kinase that phosphorylates the C-terminal domain (CTD) of the large

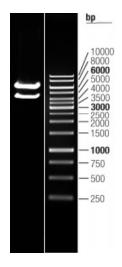
subunit of RNA polymerase II (POLR2A), thereby acting as a key regulator of transcription elongation. Regulates the expression of genes involved in DNA repair and is required for the maintenance of genomic stability. Preferentially phosphorylates 'Ser-5' in CTD repeats that are already phosphorylated 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]



Product images:



Circular map for RC213898L1



Double digestion of RC213898L1 using Ascl and Mlul