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Product datasheet for SC317169

CrkRS (CDK12) (NM_015083) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CrkRS (CDK12) (NM_015083) Human Untagged Clone
Tag:	Tag Free
Symbol:	CDK12
Synonyms:	CRK7; CRKR; CRKRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>SC317169 representing NM_015083.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTA
CCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCCC
ATGCCCAATTCAGAGAGACATGGGGGCAAGAAGGACGGGAGTGGAGGAGCTTCTGGAACTTTGCAGCCG
TCATCGGGAGGCGGCAGCTCTAACAGCAGAGAGCGTCACCGCTTGGTATCGAAGCACAAGCGGCATAAG
TCCAAACACTCCAAAGACATGGGGTTGGTGACCCCCGAAGCAGCATCCCTGGGCACAGTTATCAAACCT
TTGGTGGAGTATGATGATATCAGCTCTGATTCCGACACCTTCTCCGATGACATGGCCTTCAAACTAGAC
CGAAGGGAGAACGACGAACGTCGTGGATCAGATCGGAGCGACCGCCTGCACAAACATCGTCACCACCAG
CACAGGCGTTCCCGGGACTTACTAAAAGCTAAACAGACCGAAAAAGAAAAAAGCCAAGAAGTCTCCAGC
AAGTCGGGATCGATGAAGGACCGGATATCGGGAAGTTCAAAGCGTTCGAATGAGGAGACTGATGACTAT
GGGAAGGCGCAGGTAGCCAAAAGCAGCAGCAAGGAATCCAGGTCATCCAAGCTCCACAAGGAGAAGACC
AGGAAAGAACGGGAGCTGAAGTCTGGGCACAAAGACCGGAGTAAAAGTCATCGAAAAAGGGAAACACCC
AAAAGTTACAAAACAGTGGACAGCCCAAAACGGAGATCCAGGAGCCCCCACAGGAAGTGGTCTGACAGC
TCCAAACAAGATGATAGCCCCTCGGGAGCTTCTTATGGCCAAGATTATGACCTTAGTCCCTCACGATCT
CATACCTCGAGCAATTATGACTCCTACAAGAAAAGTCCTGGAAGTACCTCGAGAAGGCAGTCGGTCAGT
CCCCCTTACAAGGAGCCTTCGGCCTACCAGTCCAGCACCCGGTCACCGAGCCCCTACAGTAGGCGACAG
AGATCTGTCAGTCCCTATAGCAGGAGACGGTCGTCCAGCTACGAAAGAAGTGGCTCTTACAGCGGGCGA
TCGCCCAGTCCCTATGGTCGAAGGCGGTCCAGCAGCCCTTTCCTGAGCAAGCGGTCTCTGAGTCGGAGT
CCACTCCCCAGTAGGAAATCCATGAAGTCCAGAAGTAGAAGTCCTGCATATTCAAGACATTCATCTTCT
CATAGTAAAAAGAAGAGATCCAGTTCACGCAGTCGTCATTCCAGTATCTCACCTGTCAGGCTTCCACTT
AATTCCAGTCTGGGAGCTGAACTCAGTAGGAAAAAGAAGGAAAGAGCAGCTGCTGCTGCTGCAGCAAAG
ATGGATGGAAAGGAGTCCAAGGGTTCACCTGTATTTTTGCCTAGAAAAGAGAACAGTTCAGTAGAGGCT
AAGGATTCAGGTTTGGAGTCTAAAAAGTTACCCAGAAGTGTAAAATTGGAAAAATCTGCCCCAGATACT
GAACTGGTGAATGTAACACATCTAAACACAGAGGTAAAAAATTCTTCAGATACAGGGAAAGTAAAGTTG
GATGAGAACTCCGAGAAGCATCTTGTTAAAGATTTGAAAGCACAGGGAACAAGAGACTCTAAACCCATA

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GCACTGAAAGAGGAGATTGTTACTCCAAAGGAGACAGAAACATCAGAAAAGGAGACCCCTCCACCTCTT
CCCACAATTGCTTCTCCCCCACCCCCTCTACCAACTACTACCCCTCCACCTCAGACACCCCCTTTGCCA
CCTTTGCCTCCAATACCAGCTCTTCCACAGCAACCACCTCTGCCTCCTTCTCAGCCAGCATTTAGTCAG
GTTCCTGCTTCCAGTACTTCAACTTTGCCCCCTTCTACTCACTCAAAGACATCTGCTGTGTCCTCTCAG
GCAAATTCTCAGCCCCCTGTACAGGTTTCTGTGAAGACTCAAGTATCTGTAACAGCTGCTATTCCACAC
CTGAAAACTTCAACGTTGCCTCCTTTGCCCCTCCCACCCTTATTACCTGGAGATGATGACATGGATAGT
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ATCACACCACCTCAGCAACCATATAAAAAGAGACCAAAAATTTGTTGTCCTCGTTATGGAGAAAGAAGA
CAAACAGAAAGCGACTGGGGGAAACGCTGTGTGGACAAGTTTGACATTATTGGGATTATTGGAGAAGGA
ACCTATGGCCAAGTATATAAAGCCAAGGACAAAGACACAGGAGAACTAGTGGCTCTGAAGAAGGTGAGA
CTAGACAATGAGAAAGAGGGCTTCCCAATCACAGCCATTCGTGAAATCAAAATCCTTCGTCAGTTAATC
CACCGAAGTGTTGTTAACATGAAGGAAATTGTCACAGATAAACAAGATGCACTGGATTTCAAGAAGGAC
AAAGGTGCCTTTTACCTTGTATTTGAGTATATGGACCATGACTTAATGGGACTGCTAGAATCTGGTTTG
GTGCACTTTTCTGAGGACCATATCAAGTCGTTCATGAAACAGCTAATGGAAGGATTGGAATACTGTCAC
AAAAAGAATTTCCTGCATCGGGATATTAAGTGTTCTAACATTTTGCTGAATAACAGTGGGCAAATCAAA
CTAGCAGATTTTGGACTTGCTCGGCTCTATAACTCTGAAGAGAGTCGCCCTTACACAAACAAAGTCATT
ACTTTGTGGTACCGACCTCCAGAACTACTGCTAGGAGAGGAACGTTACACACCAGCCATAGATGTTTGG
AGCTGTGGATGTATTCTTGGGGAACTATTCACAAAGAAGCCTATTTTTCAAGCCAATCTGGAACTGGCT
CAGCTAGAACTGATCAGCCGACTTTGTGGTAGCCCTTGTCCAGCTGTGTGGCCTGATGTTATCAAACTG
CCCTACTTCAACACCATGAAACCGAAGAAGCAATATCGAAGGCGTCTACGAGAAGAATTCTCTTTCATT
CCTTCTGCAGCACTTGATTTATTGGACCACATGCTGACACTAGATCCTAGTAAGCGGTGCACAGCTGAA
CAGACCCTACAGAGCGACTTCCTTAAAGATGTCGAACTCAGCAAAATGGCTCCTCCAGACCTCCCCCAC
TGGCAGGATTGCCATGAGTTGTGGAGTAAGAAACGGCGACGTCAGCGACAAAGTGGTGTTGTAGTCGAA
GAGCCACCTCCATCCAAAACTTCTCGAAAAGAAACTACCTCAGGGACAAGTACTGAGCCTGTGAAGAAC
AGCAGCCCAGCACCACCTCAGCCTGCTCCTGGCAAGGTGGAGTCTGGGGCTGGGGATGCAATAGGCCTT
GCTGACATCACACAACAGCTGAATCAAAGTGAATTGGCAGTGTTATTAAACCTGCTGCAGAGCCAAACC
GACCTGAGCATCCCTCAAATGGCACAGCTGCTTAACATCCACTCCAACCCAGAGATGCAGCAGCAGCTG
GAAGCCCTGAACCAATCCATCAGTGCCCTGACGGAAGCTACTTCCCAGCAGCAGGACTCAGAGACCATG
GCCCCAGAGGAGTCTTTGAAGGAAGCACCCTCTGCCCCAGTGATCCTGCCTTCAGCAGAACAGACGACC
CTTGAAGCTTCAAGCACACCAGCTGACATGCAGAATATATTGGCAGTTCTCTTGAGTCAGCTGATGAAA
ACCCAAGAGCCAGCAGGCAGTCTGGAGGAAAACAACAGTGACAAGAACAGTGGGCCACAGGGGCCCCGA
AGAACTCCCACAATGCCACAGGAGGAGGCAGCAGAGAAGAGGCCCCCTGAGCCCCCCGGACCTCCACCG
CCGCCACCTCCACCCCCTCTGGTTGAAGGCGATCTTTCCAGCGCCCCCCAGGAGTTGAACCCAGCCGTG
ACAGCCGCCTTGCTGCAACTTTTATCCCAGCCTGAAGCAGAGCCTCCTGGCCACCTGCCACATGAGCAC
CAGGCCTTGAGACCAATGGAGTACTCCACCCGACCCCGTCCAAACAGGACTTATGGAAACACTGATGGG
CCTGAAACAGGGTTCAGTGCCATTGACACTGATGAACGAAACTCTGGTCCAGCCTTGACAGAATCCTTG
GTCCAGACCCTGGTGAAGAACAGGACCTTCTCAGGCTCTCTGAGCCACCTTGGGGAGTCCAGCAGTTAC
CAGGGCACAGGGTCAGTGCAGTTTCCAGGGGACCAGGACCTCCGTTTTGCCAGGGTCCCCTTAGCGTTA
CACCCGGTGGTCGGGCAACCATTCCTGAAGGCTGAGGGAAGCAGCAATTCTGTGGTACATGCAGAGACC
AAATTGCAAAACTATGGGGAGCTGGGGCCAGGAACCACTGGGGCCAGCAGCTCAGGAGCAGGCCTTCAC
TGGGGGGGCCCAACTCAGTCTTCTGCTTATGGAAAACTCTATCGGGGGCCTACAAGAGTCCCACCAAGA
GGGGGAAGAGGGAGAGGAGTTCCTTACTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: AscI-MluI

Plasmid Map:

ACCN: NM_015083

Insert Size: 4446 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_015083.2
RefSeq Size:	8256 bp
RefSeq ORF:	4446 bp
Locus ID:	51755
UniProt ID:	Q9NYV4
Cytogenetics:	17q12
Protein Families:	Druggable Genome, Protein Kinase
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] Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1. It encodes isoform 2, which is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.