

Product datasheet for **RC235328**

CDK5RAP2 (NM_001272039) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDK5RAP2 (NM_001272039) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDK5RAP2
Synonyms:	C48; Cep215; MCPH3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC235328 representing NM_001272039 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGATGGACTTGGTGTGGAAGAGGACGTCACCGTCCCTGGGACGCTCAGCGGCTGCAGTGGCCTTGTTCCAGTGTACCAGATGACCTGGATGGCATCAACCCCAATGCTGGGTTGGGAAATGGTCTGCTCCCAAATGTGCAGAAGAAACAGTGTCTCCACCAGAGCACGGAACATGAAGGACTTTGAAAATCAAATCACTGAATTGAAGAAAGAAAACCTTAACTAAAGCTCCGCATCTATTTCCCTTGAGGAAAGAAATGCAACAGGAATTCATGGCCCCACTGAACATATCTACAAAACAACTTGAAGCTCAAGGTGGAAGTGAAGAGTCTGAAGCGGGAACCCAGGAGAGAGCAGCTGCTCATCAAAGCCTCCAAAGCAGTTGAGAGCTTAGCTGAAGCAGGTGGCTCTGAAATCCAGCGGGTGAAGAAGATGCTCGAAAAGAGGTGCAGCAGGTGGAAGATCTCCTAACTAAAAGAACTACTCCTTTGGAAAAGGATGTGACAGCCGCCAGGCAGAACTGGAAAAGGCCTTTCAGGGACAGAGACGGAGAAGGCTCTTCGGTTGCGTTTGGAAAAGCAAGCTTTCAGAGATGAAGAAGATGCACGAGGGGACTTGGCGATGGCTCTGGTCTGGATGAGAAAAGACAGACTGATTGAGGAGTTGAAGCTGTCTTTGAAGAGCAAAGAAGCTTTAATTCAGTGCCTTAAAGAGGAGAAATCTCAGATGGCATGTCCTGATGAGAATGTCTGATCTGGAGACTCCGAGGACTTTGTGCTGCTCAAAGGGAAGAAAAGGAGAGAGAACTGAGGCTGCACAAATGGAGCATCAGAAGGAGAGAAAACAGCTTTGAAGAGAGGATCCAGGCACCTTGAAGAGGACCTGAGAGAGAAGGAAAAGAAAATTGCTACAGAGAAGAAAATAGTCTAAAGAGGGATAAAGCCATTCAGGGTTAACCATGGCATTAAAATCAAAGGAAAAAAGGTTGAAGAATTAAGTCTGAAATTGAAAAGCTCAGTGTGCTTTGCTAAAAGCCAGAGAGGCCCTACAGAAAAGCACAGACCCAGGAATTCAGGGGTCTGAAGACTATGAGACTGCTCTATCAGGAAAGGAAGCCCTTCGGCTGCGCTGCGCTCACAAAACCTCACCAAGAGTACAGAGAACCACAGACTGCGTAGAAGCATTAGAAGATCACCCAGGAGCTGAGTACTTGCAGCAGGAGAGGGAGAGACTGGAGAAGGACCTGGAGGAAGCCCATCGAGAGAAGAGCAAAGGAGACTGCACCATCCGTGATCTTAGAAATGAAGTTGAAAAATTACGCAATGAAGTGAATGAAAGAGAGAAAAGCAATGGAAAATCGTTACAAGAGTCTTCTGAGTGAAGCAATAAAAAATTGCAATCAAGAGCAAGTATCAACATCTAACAGAAAGTACCAATCAGAAGGACGTGTTGCTTCAGAAATCAATGAAAAGATTTGGAAGTAATACAGCAGAAGTCTATTTAATGGCTGCAG



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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC235328 representing NM_001272039
 Red=Cloning site Green=Tags(s)

MMDLVLEEDVTVPGTSLGCSGLVPSVPDDL DGINPNAGLNGLLPNVSEETVSPTRARNMKDFENQITEL
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 SSATSTPCVSRSLVTGHHLWASKNGRHLGLIEDYEALLKQISQGRLLAEMDIQTQEAPSSTSQELGTGK
 PHPAPLSKVFSSVSTAKLTLEEAYRRLKLLWRVSLPEDGQCPLHCEQIGEMKAEVTKLHKKLFEQEKKLQ
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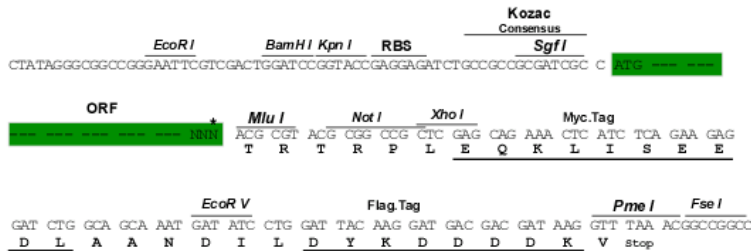
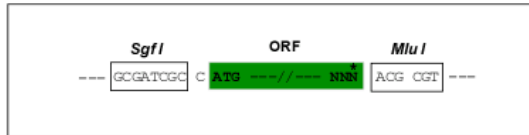
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Cloning Scheme:

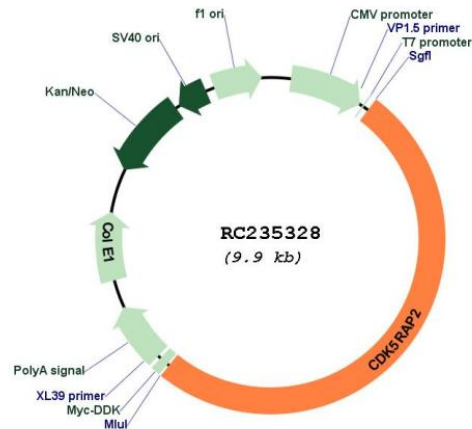
Sgfl-MluI

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001272039

ORF Size: 4989 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_001272039.1](#), [NP_001258968.1](#)

RefSeq Size: 5552 bp

RefSeq ORF: 4992 bp

Locus ID: 55755

UniProt ID: [Q96SN8](#)

Cytogenetics: 9q33.2

MW: 190.1 kDa

Gene Summary: This gene encodes a regulator of CDK5 (cyclin-dependent kinase 5) activity. The protein encoded by this gene is localized to the centrosome and Golgi complex, interacts with CDK5R1 and pericentrin (PCNT), plays a role in centriole engagement and microtubule nucleation, and has been linked to primary microcephaly and Alzheimer's disease. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013]