

Product datasheet for RC236099

OriGene Technologies, Inc.

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Centrin 3 (CETN3) (NM_001297768) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Centrin 3 (CETN3) (NM_001297768) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CETN3

Synonyms: CDC31; CEN3

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC236099 representing NM_001297768
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236099 representing NM_001297768

Red=Cloning site Green=Tags(s)

MSLALRSELVVDKTKRKKRRELSEEQKQEIKDAFELFDTDKDEAIDYHELKVAMRALGFDVKKADVLKIL KDYDREATGKITFEDFNEVVTDWILERDPHEEILKAFKLFDDDDSVLKNILLLPIWSRCLSLNREFFSEV

NQEEFIAIMTGDI

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

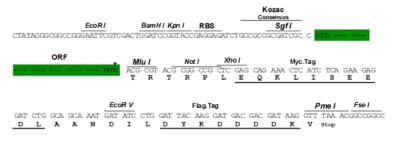
Restriction Sites: Sgfl-Mlul





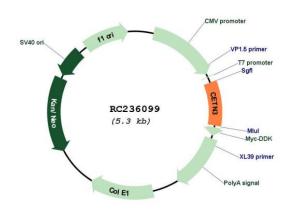
Cloning Scheme:





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

Plasmid Map:



ACCN: NM_001297768

ORF Size: 459 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.



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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 001297768.1</u>, <u>NP 001284697.1</u>

 RefSeq Size:
 1332 bp

 RefSeq ORF:
 462 bp

 Locus ID:
 1070

 UniProt ID:
 015182

 Cytogenetics:
 5q14.3

Protein Families: Druggable Genome

MW: 18.5 kDa

Gene Summary: The protein encoded by this gene contains four EF-hand calcium binding domains, and is a

member of the centrin protein family. Centrins are evolutionarily conserved proteins similar to the CDC31 protein of S. cerevisiae. Yeast CDC31 is located at the centrosome of interphase

and mitotic cells, where it plays a fundamental role in centrosome duplication and

separation. Multiple forms of the proteins similar to the yeast centrin have been identified in human and other mammalian cells, some of which have been shown to be associated with centrosome fractions. This protein appears to be one of the most abundant centrins associated with centrosome, which suggests a similar function to its yeast counterpart.

Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jul 2014]