

## Product datasheet for **RG236436**

### Centrin 3 (CETN3) (NM\_001297765) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Centrin 3 (CETN3) (NM\_001297765) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Centrin 3  
**Synonyms:** CDC31; CEN3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236436 representing NM\_001297765.  
Blue=ORF Red=Cloning site Green=Tag(s)

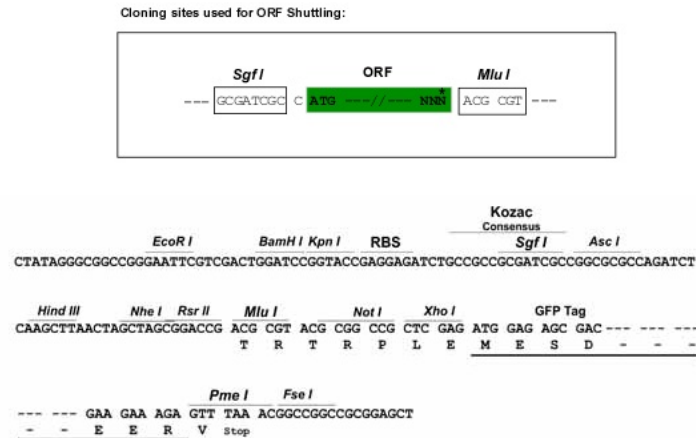
```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGAGTTTAGCTCTGAGAAGTGAGCTTGTAGTGGACAAAACAAAGAGGAAAAAAGAAGAGAACTGTCT
GAGGAACAGAAACAAGAAATTAAGATGCTTTTGAACTATTTGATACAGACAAAGATGAAGCAATAGAT
TATCATGAATTAAGGTGGCAATGAGAGCCTTGGGTTTGATGTAAGAAAGCTGATGTACTGAAGATT
CTTAAAGATTATGACAGAGAAGCCACAGGAAAAATCACCTTTGAAGATTTAATGAAGTTGTGACAGAC
TGGATATTGAAAAGAGATCCCCATGAAGAAATACTCAAGGCATTTAACTATTTGATGATGATGATTCA
GGTAAAAATAAGCTTGAGGAATTTGCGACGTGTTGCTAGAGAATTGGGTGAAAACATGAGTGATGAAGAA
CTTCGAGCTATGATAGAGAATTTGACAAAGATGGTGATGGAGAAATTTCTAAGAACATACTCTTGCTT
CCTATTTGGTCTAGATGCCTCAGTCTAAATCGGGAGTTCTTCAGTGAAGTAAACCAAGAGGAGTTCAAT
GCTATTATGACTGGTGACATT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236436  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MSLALRSELVVDKTKRKRRELSEEQKQEI KDAFELFDTDKDEAIDYHELKVAMRALGFDVKKADV LKI
LKDYDREATGKITFEDFNEVVDWILERPHEEILKAFKLFDDDDSGKISLRNLRVARELGENMSDEE
LRAMIEEFDKDGDEILKNILLPIWSRCLSLNREFFSEVNQEEFIAIMTGDI
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_001297765

**ORF Size:** 573 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).

**RefSeq:** [NM\\_001297765.1](#), [NP\\_001284694.1](#)

**RefSeq Size:** 1446 bp

**RefSeq ORF:** 576 bp

**Locus ID:** 1070

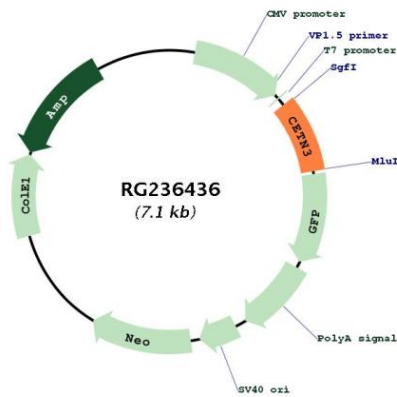
**Cytogenetics:** 5q14.3

**Protein Families:** Druggable Genome

**MW:** 22.9 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]

**Product images:**


Circular map for RG236436