

Product datasheet for RC215209L3

OriGene Technologies, Inc.

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Capicua (CIC) (NM_015125) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Capicua (CIC) (NM_015125) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: Capicua MRD45 Synonyms: **Mammalian Cell**

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC215209).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



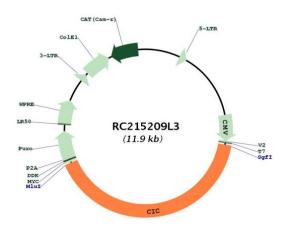


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_015125 **ORF Size:**

4824 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 015125.2</u>, <u>NP 055940.2</u>

 RefSeq Size:
 5473 bp

 RefSeq ORF:
 4827 bp

 Locus ID:
 23152

 UniProt ID:
 Q96RK0

Cytogenetics: 19q13.2 **MW:** 163.6 kDa

Gene Summary:

The protein encoded by this gene is an ortholog of the Drosophila melanogaster capicua gene, and is a member of the high mobility group (HMG)-box superfamily of transcriptional repressors. This protein contains a conserved HMG domain that is involved in DNA binding and nuclear localization, and a conserved C-terminus. Studies suggest that the N-terminal region of this protein interacts with Atxn1 (GeneID:6310), to form a transcription repressor complex, and in vitro studies suggest that polyglutamine-expansion of ATXN1 may alter the repressor activity of this complex. Mutations in this gene have been associated with olidogdendrogliomas (PMID:21817013). In addition, translocation events resulting in gene fusions of this gene with both DUX4 (GeneID:100288687) and FOXO4 (GeneID:4303) have been associated with round cell sarcomas. There are multiple pseudogenes of this gene found on chromosomes 1, 4, 6, 7, 16, 20, and the Y chromosome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Feb 2015]