

## Product datasheet for RC230839L3

### CBARA1 (MICU1) (NM\_001195518) Human Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CBARA1 (MICU1) (NM_001195518) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	CBARA1
Synonyms:	ara CALC; CALC; CBARA1; EFHA3; MPXPS
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(RC230839).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

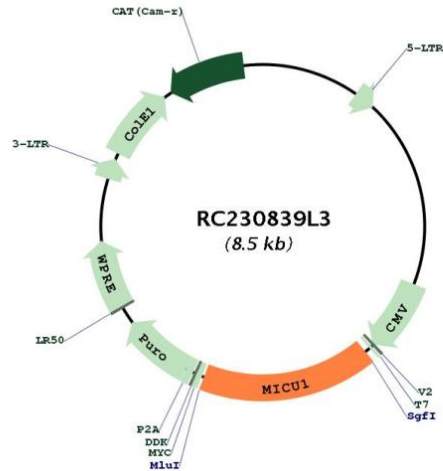


\* The last codon before the Stop codon of the ORF.



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## Plasmid Map:



ACCN: NM\_001195518

ORF Size: 1428 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\\_001195518.1](#)

RefSeq ORF: 1431 bp

Locus ID: 10367

UniProt ID: [Q9BPX6](#)

Cytogenetics: 10q22.1

MW: 54.8 kDa

**Gene Summary:** This gene encodes an essential regulator of mitochondrial Ca<sup>2+</sup> uptake under basal conditions. The encoded protein interacts with the mitochondrial calcium uniporter, a mitochondrial inner membrane Ca<sup>2+</sup> channel, and is essential in preventing mitochondrial Ca<sup>2+</sup> overload, which can cause excessive production of reactive oxygen species and cell stress. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Mar 2013]