

Product datasheet for RC231119

CBARA1 (MICU1) (NM_001195519) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | CBARA1 (MICU1) (NM_001195519) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | CBARA1 |
| Synonyms: | ara CALC; CALC; CBARA1; EFHA3; MPXPS |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC231119 representing NM_001195519 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAAAGAATATATACTTACAGACGGGCCAAGGAGATCTCAAGGACACTCCTAAAGCTCCTCAGAGAA
ATTTTGAATTCCTTCAAGATGTTTGATTTGAATGGAGATGGAGAAGTAGATATGGAAGAATTTGAACA
GGTTCAGAGCATCATTGCTCCCAAACAGTATGGGTATGCGCCACAGAGATCGTCCAACACTACTGGCAAC
ACCCTCAAGTCTGGCTTGTGTTAGCCCTCACACCTACTTTTTGGAGCTGATCTGAAGGAAAGCTGA
CAATCAAAAACCTCCTCGAATTTAGCGTAAACTGCAGCATGATGTTCTGAAGCTTGAGTTGAACGCCA
TGACCCTGTGGATGGGAGAATTACTGAGAGGCAGTTTGGTGGCATGCTACTTGCCTACAGTGGGGTGCAG
TCCAAGAAGCTGACCGCCATGCAGAGGCAGCTCAAGAAGCACTTCAAAGAAGGAAAGGGTCTGACATTT
AGGAGGTGGAGAACTTCTTTACTTTCTAAAGAACATTAATGATGTGGACTGCATTGAGTTTTACCA
TATGGCTGGAGCATCTCTTGATAAAGTGACCATGCAGCAGGTGGCCAGGACAGTGGCTAAAGTGGAGCTC
TCAGACCACGTGTGTGATGTGGTGTGACTCTTTGACTGTGATGGCAATGGCGAAGTGAACAATAAGG
AATTTGTTCCATCATGAAGCAACGGCTGATGAGAGGCCTGAAAAGCCCAAAGACATGGGTTTCACTCG
CCTCATGCAGGCCATGTGAAATGTGCACAGGAAACTGCCTGGGACTTCGCTTTACCCAAACAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC231119 representing NM_001195519
Red=Cloning site Green=Tags(s)

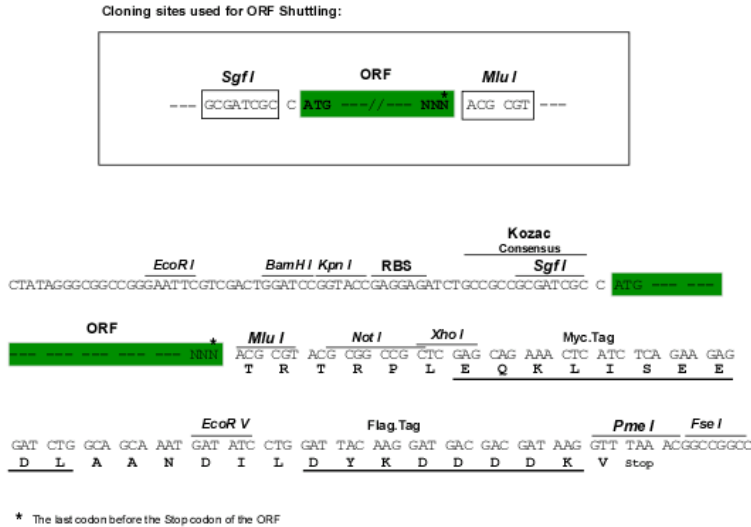
MKRIYTYRRAKEIFKDTPKAPQRNFEIAFKMFDLNGDGEVDMEEFEQVQSIIRSQTSMGMRHRDRPTTGN
 TLKSGLSALTTYFFGADLKGKLTIKNFLEFQRKLQHDVLKLEFERHDPVDGRITERQFGGMLLAYSGVQ
 SKKLTAMQRQLKKHFKEGKGLTFQEVENFFTLKNINDVDTALSFYHMAGASLDKVTMQQVARTVAKVEL
 SDHVCDVVFALFDCDNGELSNKEFVSIKQRLMRGLEKPKDMGFTRLMQAMWKAQETAWDFALPKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8048_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001195519

ORF Size: 834 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_001195519.1](#), [NP_001182448.1](#)

RefSeq ORF: 837 bp

Locus ID: 10367

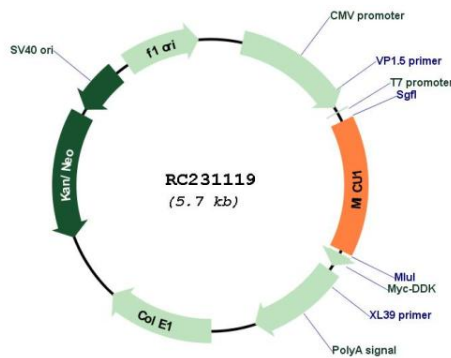
UniProt ID: [Q9BPX6](#)

Cytogenetics: 10q22.1

MW: 32.6 kDa

Gene Summary: This gene encodes an essential regulator of mitochondrial Ca²⁺ uptake under basal conditions. The encoded protein interacts with the mitochondrial calcium uniporter, a mitochondrial inner membrane Ca²⁺ channel, and is essential in preventing mitochondrial Ca²⁺ 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]

Product images:



Circular map for RC231119