OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC111147

CBARA1 (MICU1) (NM_006077) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CBARA1 (MICU1) (NM_006077) Human Untagged Clone
Tag:	Tag Free
Symbol:	CBARA1
Synonyms:	ara CALC; CALC; CBARA1; EFHA3; MPXPS
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC111147 sequence for NM_006077 edited (data generated by NextGen Sequencing)

ATGTTTCGTCTGAACTCACTTTCTGCTTTGGCAGAACTGGCTGTGGGTTCTCGATGGTAC
CATGGAGGATCACAGCCCATCCAGATCCGGCGAAGACTAATGATGGTGGCTTTCCTGGGA
GCATCTGCAGTAACTGCAAGTACTGGTCTTTTGTGGAAGAGGGCCCATGCAGAATCTCCA
CCATGTGTAGACAACCTAAAAAGTGACATCGGTGATAAAGGGAAGAATAAAGATGAAGGG
GATGTTTGTAACCATGAGAAAAAGACTGCAGATCTTGCCCCTCACCCAGAAGAGAAAAAG
AAGAAACGTTCTGGATTCAGAGACAGAAAAGTGATGGAATATGAGAATAGGATTCGAGCC
TACTCCACGCCAGACAAAATCTTCCGATATTTTGCCACCTTGAAAGTCATCAGTGAGCCT
GGTGAAGCAGAAGTGTTTATGACACCAGAAGATTTTGTGCGATCCATAACACCCAATGAA
AAACAACCAGAACACTTGGGTCTGGATCAATATATAATAAAACGCTTTGATGGAAAGACA
GAGAAAATTTCCCAGGAACGAGAAAAATTTGCTGATGAAGGCAGTATATTTTACACCCTT
GGAGAATGTGGGCTCATATCCTTTTCAGACTACATTTTCCTCACAACTGTTCTTTCCACT
CCTCAGAGAAATTTTGAAATTGCCTTCAAGATGTTTGATTTGAATGGAGATGGAGAAGTA
GATATGGAAGAATTTGAACAGGTTCAGAGCATCATTCGCTCCCAAACCAGTATGGGTATG
CGCCACAGAGATCGTCCAACTACTGGCAACACCCTCAAGTCTGGCTTGTGTTCAGCCCTC
ACAACCTACTTTTTTGGAGCTGATCTGAAGGGAAAGCTGACAATCAAAAACTTCCTCGAA
TTTCAGCGTAAACTGCAGCATGATGTTCTGAAGCTTGAGTTTGAACGCCATGACCCTGTG
GATGGGAGAATTACTGAGAGGCAGTTTGGTGGCATGCTACTTGCCTACAGTGGGGTGCAG
TCCAAGAAGCTGACCGCCATGCAGAGGCAGCTCAAGAAGCACTTCAAAGAAGGAAAGGGT
CTGACATTTCAGGAGGTGGAGAACTTCTTTACTTTCCTAAAGAACATTAATGATGTGGAC
ACTGCATTGAGTTTTTACCATATGGCTGGAGCATCTCTTGATAAAGTGACCATGCAGCAG
GTGGCCAGGACAGTGGCTAAAGTGGAGCTCTCAGACCACGTGTGTGATGTGGTGTTTGCA
CTCTTTGACTGTGATGGCAATGGCGAACTGAGCAATAAGGAATTTGTTTCCATCATGAAG
CAACGGCTGATGAGAGGCCTGGAAAAGCCCAAAGACATGGGTTTCACTCGCCTCATGCAG
GCCATGTGGAAATGTGCACAGGAAACTGCCTGGGACTTCGCTTTACCCAAACAGTAA

Clone variation with respect to NM_006077.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006077 unedited

GGTTAGGAATTGAAACCGACTCACTATAGGCGGACGCGCATTCGGCACGAGGAGGTGGGT
TGCTTTGACCGAGAGGCTGCTGGAGCTCGTGTTTGGACGCGATGTTTCGTCTGAACTCAC
TTTCTGCTTTGGCAGAACTGGCTGTGGGTTCTCGATGGTACCATGGAGGATCACAGCCCA
TCCAGATCCGGCGAAGACTAATGATGGTTGTTTTCCTGGGAGCATCTGCAGTAACTGCAA
GTACTGGTCTTTTGTGGAAGAGGGCCCATGCAGAATCTCCACCATGTGTAGACAACCTAA
AAAGTGACATCGGTGATAAAGGGAAGAATAAAGATGAAGGGGATGTTTGTAACCATGAGA
AAAAGACTGCAGATCTTGCCCCTCACCCAGAAGAGAAAAAGAAGAAACGTTCTGGATTCA
GAGACAGAAAAGTGATGGAATATGAGAATAGGATTCGAGCCTACTCCACGCCAGACAAAA
TCTTCCGATATTTTGCCACCTTGAAAGTCATCAGTGAGCCTGGTGAAGCAGAAGTGTTTA
TGACACCAGAAGATTTTGTGCGATCCATAACACCCAATGAAAAACAACCAGAACACTTGG
GTCTGGATCAATATATAATAAAACGCTCTGATGGAAAGACAGAGAAAATTTCCCAGGAAC
GAGAAAAATTTGCTGATGAAGGCAGTATATTTTACACCCCTTGGAGATGTGGGCTCATAT
CCTTTTTAGACTACATTTTCCTCACAACTGTTCTTTCCACTCCTCAGAGAAATTTTGAAA
TTGCCCTTCAGATGTTTGATTTGAATGGAGATGCAGCAGTAGATATGGCAAGATTTGAAC
AGTTTCAGAGCATCATTCGCTCCCAACCAGTATGGGTATGCGCCACAGGAGATCGCCCAC
TACTGCCA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006077 unedited
CGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTAACTTTGGGGATGTTTATTGC
AAATGGTTATAATTTAAGTGATATTTACAATTGTTTAAGACAGAGGGCAAACAGGCTCTG
AGCCAGGCCTCAGCTTTAGAGGCCCATCCTGGAGAGGAAATGGCACTTGCAGGGAACATG
AGCTCAATCACTATTGCTCACTAAGCACAGGGTCACACTGGAGTCATCTTAGGGAGGCTG
CGAGGAAGAAAAGGGAGTGCACAGAGCCATGAAGCAACTACTTTAAATTCTGAATCTTGC
TGTGTTCCCACTGAGCATGCTGCCTTCCTAGAGCAGGCCTTGGAGCCATCCCAGGGACTA
ACACAGATCCTTCCTGGGGCGCAGGCTTCTCACACTAGCGTAGGGTGCCTAGGTCATCCT
CATCATTGTTTATCATCACAGACTTCTTTCTGCCTGCCAGATATCTTCCCTACTTGTGGC
TTTAAAACACCAGCAGGAGGGAAGTCAAGGAATGTTCTTGTTAGTATAAATCCATAGCAA
AAACGATTTGAGAACTGGATGCTTCCCAGGGTTGGCAGGTGTGTGGATGGTTCCCTGAAT
TCTTTATCCACAGGATGCTTGAATGGGTGGTGCTGTTGAGGCTGACAAATGTCTGAGCTT
TACAGACTTGTTCATGTTTTTGAGAACCTATGGGGATACTCATTGGGCAGAATCAGAGCC
CAGCAGAACACGGGGACGGNGAAGGGTAAAGAGGGGAAACCGACGAGTCTGGGTNTTTCC
CCCGCGGGGGGAAAAGGGAAACATCCTCCCCGAACCACCAGCACAAAGGGCTCTGCCGAG
ACTCTGCGGAGGGGGGCCCAGGTACCTGGGTGGGGAGGGGGGCCCCCCCTTGCAGGTGGG
GGGTTCCTGTTTGGGTAAAGCAAAATCCCAGGCACGTTCCTGGGCCATTTCCCAATGCCT
GA

Restriction Sites: NotI-NotI

ACCN: NM_006077

Insert Size: 2500 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_006077.1, NP_006068.1

RefSeq Size: 2387 bp

RefSeq ORF: 1437 bp

Locus ID: 10367

UniProt ID: Q9BPX6

Cytogenetics: 10q22.1

Domains: EFh

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]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest protein (isoform 1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.