

## **Product datasheet for TR314182**

## OriGene Technologies, Inc.

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## **CBARA1** (MICU1) Human shRNA Plasmid Kit (Locus ID 10367)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: CBARA1 (MICU1) Human shRNA Plasmid Kit (Locus ID 10367)

**Locus ID:** 10367

**Synonyms:** ara CALC; CALC; CBARA1; EFHA3; MPXPS

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MICU1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

10367). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001195518, NM 001195519, NM 006077, NM 006077.1, NM 006077.2, NM 006077.3,

NM 001195518.1, NM 001195519.1, BC004190, BC004190.2, BC004216, BC016641,

NM 001363513, NM 001195518.2

UniProt ID: Q9BPX6

**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]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).