

Product datasheet for TL314182

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

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: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

Components: MICU1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 10367).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, 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 <u>custom shRNA service</u>.



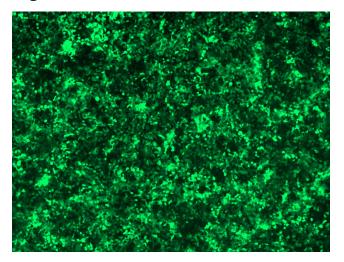


Performance Guaranteed:

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.

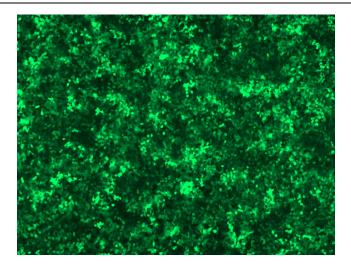
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

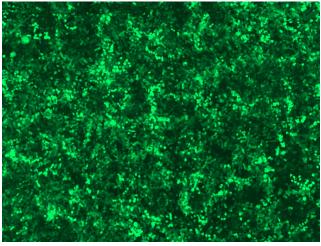


GFP signal was observed under microscope at 48 hours after transduction of TL314182A virus into HEK293 cells. TL314182A virus was prepared using lenti-shRNA TL314182A and [TR30037] packaging kit.

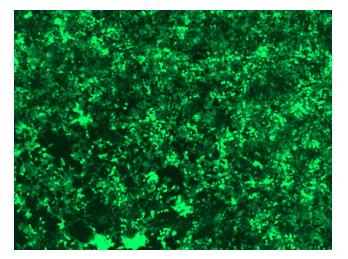




GFP signal was observed under microscope at 48 hours after transduction of TL314182B virus into HEK293 cells. TL314182B virus was prepared using lenti-shRNA TL314182B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL314182C] virus into HEK293 cells. [TL314182C] virus was prepared using lenti-shRNA [TL314182C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL314182D] virus into HEK293 cells. [TL314182D] virus was prepared using lenti-shRNA [TL314182D] and [TR30037] packaging kit.