

Product datasheet for KN200921RB

OriGene Technologies, Inc.

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CBARA1 (MICU1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD Symbol: CBARA1 Locus ID: 10367

Components: KN200921G1, CBARA1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN200921G2, CBARA1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN200921RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is

designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

RefSeq: <u>NM 001195518, NM 001195519, NM 006077, NM 001363513</u>

UniProt ID: Q9BPX6

Synonyms: CALC; CBARA1; EFHA3; MPXPS

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

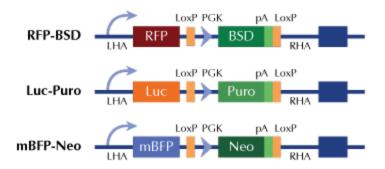
described. [provided by RefSeq, Mar 2013]





Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter