

Product datasheet for KN212244RB

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

PGC1 alpha (PPARGC1A) 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: PGC1 alpha

Locus ID: 10891

Components: KN212244G1, PGC1 alpha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN212244G2, PGC1 alpha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN212244RBD**, 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: NM 001330751, NM 001330752, NM 001330753, NM 013261, NM 001354825,

NM 001354826, NM 001354827, NM 001354828, NR 148981, NR 148982, NR 148983,

NR 148984, NR 148985, NR 148986, NR 148987

UniProt ID: Q9UBK2

Synonyms: LEM6; PGC-1(alpha); PGC-1alpha; PGC-1v; PGC1; PGC1A; PPARGC1

Summary: The protein encoded by this gene is a transcriptional coactivator that regulates the genes

involved in energy metabolism. This protein interacts with PPARgamma, which permits the interaction of this protein with multiple transcription factors. This protein can interact with, and regulate the activities of, cAMP response element binding protein (CREB) and nuclear respiratory factors (NRFs). It provides a direct link between external physiological stimuli and the regulation of mitochondrial biogenesis, and is a major factor that regulates muscle fiber

type determination. This protein may be also involved in controlling blood pressure,

regulating cellular cholesterol homoeostasis, and the development of obesity. [provided by

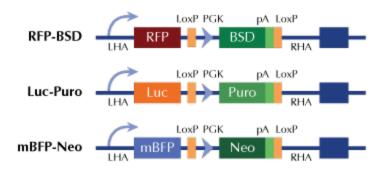
RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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