

Product datasheet for KN214993BN

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PERK (EIF2AK3) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: PERK Locus ID: 9451

Components: KN214993G1, PERK gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN214993G2, PERK gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN214993BND, donor DNA containing left and right homologous arms and mBFP-Neo

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 001313915, NM 004836

UniProt ID: Q9NZJ5

Synonyms: PEK; PERK; WRS

Summary: The protein encoded by this gene phosphorylates the alpha subunit of eukaryotic translation-

initiation factor 2, leading to its inactivation, and thus to a rapid reduction of translational initiation and repression of global protein synthesis. This protein is thought to modulate mitochondrial function. It is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malfolded proteins. Mutations in this gene are

associated with Wolcott-Rallison syndrome. [provided by RefSeq, Sep 2015]





Product images:

Donor Vector Edited Chromosome



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