

Product datasheet for KN209530BN

OriGene Technologies, Inc.

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DNA Ligase III (LIG3) 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: DNA Ligase III

Locus ID: 3980

Components: KN209530G1, DNA Ligase III gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN209530G2, DNA Ligase III gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN209530BND**, 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: <u>NM 002311</u>, <u>NM 013975</u>

UniProt ID: P49916
Synonyms: LIG2

Summary: This gene is a member of the DNA ligase family. Each member of this family encodes a

protein that catalyzes the joining of DNA ends but they each have a distinct role in DNA metabolism. The protein encoded by this gene is involved in excision repair and is located in both the mitochondria and nucleus, with translation initiation from the upstream start codon allowing for transport to the mitochondria and translation initiation from a downstream start codon allowing for transport to the nucleus. Additionally, alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]



Product images:

Donor Vector Edited Chromosome



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