

Product datasheet for KN221966LP

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

DNMT3B Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: DNMT3B

Locus ID: 1789

Components: KN221966G1, DNMT3B gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN221966G2, DNMT3B gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN221966LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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 001207055, NM 001207056, NM 006892, NM 175848, NM 175849, NM 175850

UniProt ID: Q9UBC3

Synonyms: ICF; ICF1; M.HsallIB

Summary: CpG methylation is an epigenetic modification that is important for embryonic development,

imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA

methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than

maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined.

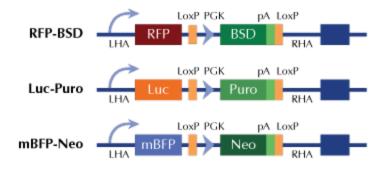
[provided by RefSeq, May 2011]





Product images:

Donor Vector Edited Chromosome



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