

Product datasheet for KN201612RB

MGMT 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: Symbol: MGMT Locus ID: 4255

KN201612G1, MGMT gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN201612G2, MGMT gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN201612RBD, 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.

NM 002412 RefSeq:

UniProt ID: P16455

methylguanine-DNA methyltransferase; O-6-methylguanine-DNA methyltransferase; O6-Synonyms:

methylguanine-DNA methyltransferase; OTTHUMP00000020741

Summary: Alkylating agents are potent carcinogens that can result in cell death, mutation and cancer.

> The protein encoded by this gene is a DNA repair protein that is involved in cellular defense against mutagenesis and toxicity from alkylating agents. The protein catalyzes transfer of methyl groups from O(6)-alkylguanine and other methylated moieties of the DNA to its own molecule, which repairs the toxic lesions. Methylation of the genes promoter has been

> associated with several cancer types, including colorectal cancer, lung cancer, lymphoma and

glioblastoma. [provided by RefSeq, Sep 2015]



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

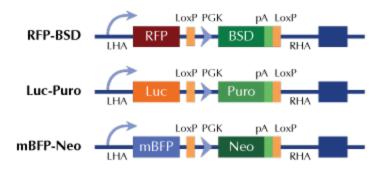
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Product images:

Donor Vector Edited Chromosome



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