

Product datasheet for KN201612BN

MGMT 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: MGMT

Locus ID: 4255

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

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

KN201612BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: <u>NM 002412</u>

UniProt ID: P16455

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

methylguanine-DNA methyltransferase; OTTHUMP0000020741

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

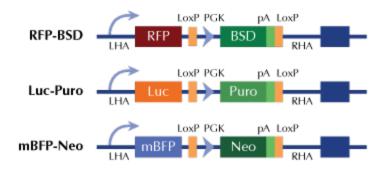
CN: techsupport@origene.cn

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