

## Product datasheet for KN203765LP

#### OriGene Technologies, Inc.

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## MAT1A 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: MAT1A Locus ID: 4143

**Components: KN203765G1**, MAT1A gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN203765G2, MAT1A gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN203765LPD, 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 000429

 UniProt ID:
 Q00266

Synonyms: MAT; MATA1; SAMS; SAMS1

**Summary:** This gene catalyzes a two-step reaction that involves the transfer of the adenosyl moiety of

ATP to methionine to form S-adenosylmethionine and tripolyphosphate, which is

subsequently cleaved to PPi and Pi. S-adenosylmethionine is the source of methyl groups for most biological methylations. The encoded protein is found as a homotetramer (MAT I) or a homodimer (MAT III) whereas a third form, MAT II (gamma), is encoded by the MAT2A gene. Mutations in this gene are associated with methionine adenosyltransferase deficiency.

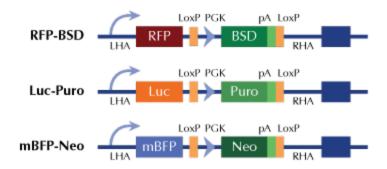
[provided by RefSeq, Jul 2008]





# **Product images:**

### Donor Vector Edited Chromosome



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