

## Product datasheet for **KN215488**

### mtTFA (TFAM) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	mtTFA
Locus ID:	7019
Components:	<p><b>KN215488G1</b>, mtTFA gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCGACTGCGCTCCCCCTTC</p> <p><b>KN215488G2</b>, mtTFA gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGTTTCTCCGAAGCATGTG</p> <p><b>KN215488D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

#### Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
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AACACTGCGG CCAACTTACT TCTGACAACG ATCGGAGGAC CGAAGGAGCT AACCGCTTTT TTGCACAACA
TGGGGGATCA TGTAACCTCGC CTT

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**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\\_001270782](#), [NM\\_003201](#), [NM\\_012251](#), [NR\\_073073](#)

**UniProt ID:**

[Q00059](#)

**Synonyms:**

MTTF1; MTTFA; TCF6; TCF6L1; TCF6L2; TCF6L3

**Summary:**

This gene encodes a key mitochondrial transcription factor containing two high mobility group motifs. The encoded protein also functions in mitochondrial DNA replication and repair. Sequence polymorphisms in this gene are associated with Alzheimer's and Parkinson's diseases. There are pseudogenes for this gene on chromosomes 6, 7, and 11. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

Product images:

