

## **Product datasheet for TR319081**

## MT3 Human shRNA Plasmid Kit (Locus ID 4504)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: MT3 Human shRNA Plasmid Kit (Locus ID 4504)

**Locus ID:** 4504

**Synonyms:** GIF; GIFB; GRIF; ZnMT3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MT3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

4504). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** <u>BC013081, NM 005954, NM 005954.1, NM 005954.2, BC013081.1, BC035624, BC047694,</u>

NM 005954.4

UniProt ID: P25713

**Summary:** This gene is a member of the metallothionein family of genes. Proteins encoded by this gene

family are low in molecular weight, are cysteine-rich, lack aromatic residues, and bind divalent heavy metal ions. This gene family member displays tissue-specific expression, and contains a threonine insert near its N-terminus and a glutamate-rich beyapentide insert near

contains a threonine insert near its N-terminus and a glutamate-rich hexapeptide insert near its C-terminus relative to the proteins encoded by other gene family members. It plays an important role in zinc and copper homeostasis, and is induced under hypoxic conditions. The encoded protein is a growth inhibitory factor, and reduced levels of the protein are observed in the brains of individuals with some metal-linked neurodegenerative disorders such as

Alzheimer's disease. [provided by RefSeq, Sep 2017]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



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## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).