

Product datasheet for TL301657

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SLC19A3 Human shRNA Plasmid Kit (Locus ID 80704)

Product data:

Product Type: shRNA Plasmids

Product Name: SLC19A3 Human shRNA Plasmid Kit (Locus ID 80704)

Locus ID: 80704

Synonyms: BBGD; THMD2; thTr-2; THTR2

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: SLC19A3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

80704). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 025243, NM 025243.1, NM 025243.2, NM 025243.3, BC032014, BC032014.1,

NM 025243.4

UniProt ID: O9BZV2

Summary: This gene encodes a ubiquitously expressed transmembrane thiamine transporter that lacks

folate transport activity. Mutations in this gene cause biotin-responsive basal ganglia disease

(BBGD); a recessive disorder manifested in childhood that progresses to chronic

encephalopathy, dystonia, quadriparesis, and death if untreated. Patients with BBGD have bilateral necrosis in the head of the caudate nucleus and in the putamen. Administration of

high doses of biotin in the early progression of the disorder eliminates pathological

symptoms while delayed treatment results in residual paraparesis, mild cognitive disability, or

dystonia. Administration of thiamine is ineffective in the treatment of this disorder.

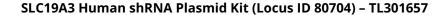
Experiments have failed to show that this protein can transport biotin. Mutations in this gene

also cause a Wernicke's-like encephalopathy.[provided by RefSeq, Jan 2010]

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 <u>custom shRNA service</u>.







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).