

## **Product datasheet for TG309395**

## **OriGene Technologies, Inc.**9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

## **SLC17A4 Human shRNA Plasmid Kit (Locus ID 10050)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** SLC17A4 Human shRNA Plasmid Kit (Locus ID 10050)

**Locus ID:** 10050

Synonyms: KAIA2138

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: SLC17A4 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID =

10050). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

**RefSeq:** NM 001286121, NM 005495, NM 005495.1, NM 005495.2, NM 001286121.1, BC109207,

BC109208

UniProt ID: Q9Y2C5

**Summary:** Phosphate homeostasis is maintained by regulating intake, intestinal absorption, bone

deposition and resorption, and renal excretion of phosphate. The central molecule in the control of phosphate excretion from the kidney is the sodium/phosphate cotransporter NPT1

(SLC17A1; MIM 182308), which is located in the renal proximal tubule. NPT1 uses the

transmembrane electrochemical potential gradient of sodium to transport phosphate across the cell membrane. SLC17A4 is a similar sodium/phosphate cotransporter in the intestinal mucosa that plays an important role in the absorption of phosphate from the intestine (summary by Shibui et al., 1999 [PubMed 10319585]).[supplied by OMIM, Feb 2011]

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).