

## **Product datasheet for TL307448**

## OriGene Technologies, Inc.

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## HCP1 (SLC46A1) Human shRNA Plasmid Kit (Locus ID 113235)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: HCP1 (SLC46A1) Human shRNA Plasmid Kit (Locus ID 113235)

**Locus ID:** 113235

**Synonyms:** G21; HCP1; PCFT

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: SLC46A1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

113235). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001242366, NM 080669, NM 080669.1, NM 080669.2, NM 080669.3, NM 080669.4,

NM 080669.5, NM 001242366.1, NM 001242366.2, BC010691, BC022100, BC065365,

NM 001242366.3

UniProt ID: Q96NT5

**Summary:** This gene encodes a transmembrane proton-coupled folate transporter protein that

facilitates the movement of folate and antifolate substrates across cell membranes, optimally in acidic pH environments. This protein is also expressed in the brain and choroid plexus where it transports folates into the central nervous system. This protein further functions as a heme transporter in duodenal enterocytes, and potentially in other tissues like liver and kidney. Its localization to the apical membrane or cytoplasm of intestinal cells is modulated by dietary iron levels. Mutations in this gene are associated with autosomal recessive hereditary folate malabsorption disease. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Aug 2013]

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).