

## Product datasheet for **TR309373**

### Solute carrier family 22 member 5 (SLC22A5) Human shRNA Plasmid Kit (Locus ID 6584)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Solute carrier family 22 member 5 (SLC22A5) Human shRNA Plasmid Kit (Locus ID 6584)
Locus ID:	6584
Synonyms:	CDSP; OCTN2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SLC22A5 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 6584). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_003060</a> , <a href="#">NM_001308122</a> , <a href="#">NM_003060.1</a> , <a href="#">NM_003060.2</a> , <a href="#">NM_003060.3</a> , <a href="#">BC012325</a> , <a href="#">BC012325.1</a> , <a href="#">BM693015</a> , <a href="#">NM_003060.4</a>
UniProt ID:	<a href="#">O76082</a>
Summary:	Polyspecific organic cation transporters in the liver, kidney, intestine, and other organs are critical for elimination of many endogenous small organic cations as well as a wide array of drugs and environmental toxins. The encoded protein is a plasma integral membrane protein which functions both as an organic cation transporter and as a sodium-dependent high affinity carnitine transporter. The encoded protein is involved in the active cellular uptake of carnitine. Mutations in this gene are the cause of systemic primary carnitine deficiency (CDSP), an autosomal recessive disorder manifested early in life by hypoketotic hypoglycemia and acute metabolic decompensation, and later in life by skeletal myopathy or cardiomyopathy. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Apr 2015]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).