

Product datasheet for TL314193

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

CARKL (SHPK) Human shRNA Plasmid Kit (Locus ID 23729)

Product data:

Product Type: shRNA Plasmids

Product Name: CARKL (SHPK) Human shRNA Plasmid Kit (Locus ID 23729)

Locus ID: 23729

Synonyms: CARKL; SHK

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

Components: SHPK - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 23729).

5µg purified plasmid DNA per construct

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

RefSeq: NM 013276, NM 013276.1, NM 013276.2, BC020543, BC020543.1, BC111366, NM 013276.4

UniProt ID: Q9UHJ6

Summary: The protein encoded by this gene has weak homology to several carbohydrate kinases, a

class of proteins involved in the phosphorylation of sugars as they enter a cell, inhibiting return across the cell membrane. Sequence variation between this novel gene and known carbohydrate kinases suggests the possibility of a different substrate, cofactor or changes in kinetic properties distinguishing it from other carbohydrate kinases. The gene resides in a region commonly deleted in cystinosis patients, suggesting a role as a modifier for the cystinosis phenotype. The genomic region is also rich in Alu repetitive sequences, frequently

involved in chromosomal rearrangements. [provided by RefSeq, Jul 2008]

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).