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Product datasheet for TL703393

Slc38a9 Rat shRNA Plasmid (Locus ID 310091)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Slc38a9 Rat shRNA Plasmid (Locus ID 310091)
Locus ID:	310091
Synonyms:	RGD1311881
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Slc38a9 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 310091). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	NM_001035251, NM_001035251.1, BC088241, BC092662, BC105869
UniProt ID:	Q3B8Q3
Summary:	Lysosomal amino acid transporter involved in the activation of mTORC1 in response to amino acid levels. Probably acts as an amino acid sensor of the Rag GTPases and Ragulator complexes, 2 complexes involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Following activation by amino acids, the Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated. SLC38A9 mediates transport of amino acids with low capacity and specificity with a slight preference for polar amino acids. Acts as an arginine sensor. Following activation by arginine binding, mediates transport of leucine, tyrosine and phenylalanine with high efficiency, and is required for the efficient utilization of these amino acids after lysosomal protein degradation. [UniProtKB/Swiss-Prot Function]
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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).