

Product datasheet for TL515269

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

Slc38a9 Mouse shRNA Plasmid (Locus ID 268706)

Product data:

Product Type: shRNA Plasmids

Product Name: Slc38a9 Mouse shRNA Plasmid (Locus ID 268706)

Locus ID: 268706

Synonyms: 4833412L08Rik; 6720411P22Rik; 9130023D20Rik; 9430067K09Rik; A730092C09

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Slc38a9 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

268706). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC052361, NM 178746, NM 178746.1, NM 178746.2, NM 178746.3, NM 178746.4,</u>

NM 175376

UniProt ID: Q8BGD6

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 <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).