

Product datasheet for TR510021

OriGene Technologies, Inc.

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Slc1a2 Mouse shRNA Plasmid (Locus ID 20511)

Product data:

Product Type: shRNA Plasmids

Product Name: Slc1a2 Mouse shRNA Plasmid (Locus ID 20511)

Locus ID: 20511

Synonyms: 1700091C19Rik; 2900019G14Rik; Al159670; Eaat2; GLT-1; GLT1; MGLT1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Slc1a2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

20511). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001077514, NM 001077515, NM 011393, NM 001361018, NM 001077515.1,

NM 001077515.2, NM 001077514.1, NM 001077514.2, NM 001077514.3, NM 011393.1,

NM 011393.2, BC138255, BC060256, BC078451, BC138256, NM 001077514.4

UniProt ID: P43006

Summary: Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-

glutamate and also L-aspartate and D-aspartate (PubMed:7698742, PubMed:7557442, PubMed:9373176). Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion. Mediates Cl(-) flux that is not coupled to amino acid transport; this avoids the

accumulation of negative charges due to aspartate and Na(+) symport (By similarity). Essential for the rapid removal of released glutamate from the synaptic cleft, and for terminating the postsynaptic action of glutamate (PubMed:9180080).[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).