

Product datasheet for **RR207681L4V**

Slc38a9 (NM_001035251) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Slc38a9 (NM_001035251) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Slc38a9
Synonyms:	RGD1311881
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001035251
ORF Size:	1677 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR207681).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_001035251.1 , NP_001030328.1
RefSeq Size:	1807 bp
RefSeq ORF:	1680 bp
Locus ID:	310091
UniProt ID:	Q3B8Q3
Cytogenetics:	2q14


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Gene 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]