

Product datasheet for **MR208367L4V**

Slc1a1 (NM_009199) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Slc1a1 (NM_009199) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Slc1a1
Synonyms:	D130048G10Rik; EAAC1; EAAC2; EAAT3; MEAAC1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_009199
ORF Size:	1569 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR208367).
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_009199.2
RefSeq Size:	3708 bp
RefSeq ORF:	1572 bp
Locus ID:	20510
UniProt ID:	P51906
Cytogenetics:	19 C1



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Gene Summary:

Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:12119102, PubMed:18684713). Can also transport L-cysteine (PubMed:30840898). 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). Plays an important role in L-glutamate and L-aspartate reabsorption in renal tubuli (PubMed:9233792). Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate (PubMed:9233792). Contributes to glutathione biosynthesis and protection against oxidative stress via its role in L-glutamate and L-cysteine transport (PubMed:30840898). Negatively regulated by ARL6IP5 (PubMed:12119102).[UniProtKB/Swiss-Prot Function]