

Product datasheet for MC205239

Slc1a1 (NM_009199) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a1 (NM_009199) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Slc1a1
Synonyms:	D130048G10Rik; EAAC1; EAAC2; EAAT3; MEAAC1
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC065099

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GCGCTGACAGCGGCCGGTGCGCGTTGTCTCCACTGTGCCCTGCATCCCGCATCTCGCATCGGCCAGGCTA
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TATTTGACTTTATAGCCTTGGTTCTCTGGGTTTAGGGATTTGGGGTGAGATGAACTGAAAGGAAATTAAG
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 CTCCTCCACTTCTTCTCCCTTAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites:

Ascl-NotI

ACCN:

NM_009199

Insert Size:

1572 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq:

[BC065099](#), [AAH65099](#)

RefSeq Size: 3754 bp

RefSeq ORF: 1572 bp

Locus ID: 20510

UniProt ID: [P51906](#)

Cytogenetics: 19 C1

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]