

Product datasheet for **MC219652**

Slc5a8 (NM_145423) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc5a8 (NM_145423) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Slc5a8
Synonyms:	Ait; SMCT
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC219652 representing NM_145423
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACGCGTCGCGGGACATCGGCAGTTTTGTGGTGTGGGACTACGTGGTGTTCGAGGCATGCTGCTCA
 TCTCGGGGCTATAGGCATCTATTACGCCTTCGCGGGGGCGGCCAGCAGACCTCCAAGGACTTTCTTAT
 GGGCGGTTCGAGTATGTCCGCCGTGCCTGTGGCTCTGTCCCTCACCGCCAGCTTCATGTCCGCTGCACT
 GTCTGGGCACTCCTGCCGAGGTCTACCGTTTTGGGGGATATTCAGCATCTTTGTCATCACCTACTTTT
 TTGTAGTGGTTATCAGCGCGGAGGTCTTCCCTCCAGTGTCTATAGGCTGGGGATCACCAGCACCTACGA
 GTATTTGGAACCTCGATTTAATCGATGCATTCTGTCTGTGGCACAATCCTCTTCATCGTTCAAACAATT
 CTGTACACTGGAATTGTATTTATGCCCTGCTCTGGCTTTGAATCAAGTTACAGGATTTGATCTGTGGG
 GCGCAGTGGTGGCCACAGGGTGGTCTGCACATCTACTGCACACTGGGCGGTCTTAAAGCAGTTGTCTG
 GACAGATGTTTTCAAGTTGGGATCATGGTGGCTGGATTGCATCCGTAATTATACAGGCATCAATAACT
 CAACATGGCATCAATAAGATTTAAGTGATGCTTTAATGGTGGAAAGATTAACCTTCTGGAATTTTGATC
 TAACCTTTGCAAAGACACACGTTCTGGACAATTGTCATTGGAGGGACTTTTACCTGGACCACCATCTA
 TGGTGTCAACAGTCCCAAGTGCAGAGATATATTTCTGTAAAAGCAGACTCCATGCAAAACTGTCCCTC
 TATGTCAAACCTTGTGGGCTCTGGGTGATCCTCACCTGCTCCATATTCTGTGGGCTTGCCCTGACTCCA
 GATACCGTGAATGTGATCCCTGGACATCAAGAAAGTGTGAGCGATTGACCAGCTTATGCCTTATTTGGT
 GTTGGACATTTGAAAATTACCTGGTGTCCCGACTTTTTGTGGCTGCGCTTACAGTGGGACATTA
 AGCACAGTGCCTCCAGTATCAATGCCTTGGCGCAGTCACCGTGAAGATCTCATCAAACCCCGCTTTA
 AGTCTCTCAGAGAAGTCTGTCTTGGATTTCCCAAGGAATGAGTGTCTGTATGGAGCTCTGTGCAT
 TGGAATGGCTGCCCTGGCATCGCTGATGGGAGCCTTGTACAGGCAGCACTCAGCATATTCGGCATGGTT
 GGTGGACCACTTCTGGGCTGTTTTCTTTGGGCATCTTGGTCCCCTTCGCCAACTCGATTGGAGCACTCA
 CTGGTCTGTTGGCTGGATTTGCCATTTCTTATGGGTAGGAATTGGAGCCAGCTTTATCCTCCGCTTCC
 TGAGAGAACCTTACCATTGCCCTTGAACCTATGGCTGTAACATCACGCACAATGGGTGCGACTGGATG
 TCAACCACAGAAATGCCATTTTCTACTAGCGCTTTTCAAATACATAATGCGGAAAGGACTCCACTGATGG
 ACAATTGGTATTCATTATCATATCTGTACTTCAGTACTATTGGAACGCTGACAACACTGTTTGTGGGGAT
 ACTTATCAGTTATCAACAGGAGGAAGAAAACAGAAGTATGATCCCCGATTCTTACTAACCAAACAGGAC
 TTTTTATCCAATTTGATGTTTTAAGAAAAGGAATCATGTTTTAAACTATAAATGCATCCTGTGGAAG
 TTGGTGGAACTGATAACCTGCCTTCAACCATGTTGAGCTGAAGTTCACAGATCACAGTGCCAAGATCAA
 TGGGACTCGCTT**GTA**

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-RsrII
- ACCN:** NM_145423
- Insert Size:** 1836 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: [NM_145423.2](#), [NP_663398.2](#)

RefSeq Size: 5346 bp

RefSeq ORF: 1836 bp

Locus ID: 216225

UniProt ID: [Q8BYF6](#)

Cytogenetics: 10 C1

Gene Summary: Acts as an electrogenic sodium (Na⁺) and chloride (Cl⁻)-dependent sodium-coupled solute transporter, including transport of monocarboxylates (short-chain fatty acids including L-lactate, D-lactate, pyruvate, acetate, propionate, valerate and butyrate), lactate, monocarboxylate drugs (nicotinate, benzoate, salicylate and 5-aminosalicylate) and ketone bodies (beta-D-hydroxybutyrate, acetoacetate and alpha-ketoisocaproate), with a Na⁺:substrate stoichiometry of between 4:1 and 2:1. Catalyzes passive carrier mediated diffusion of iodide. Mediates iodide transport from the thyrocyte into the colloid lumen through the apical membrane. May be responsible for the absorption of D-lactate and monocarboxylate drugs from the intestinal tract. May play a critical role in the entry of L-lactate and ketone bodies into neurons by a process driven by an electrochemical Na⁺ gradient and hence contribute to the maintenance of the energy status and function of neurons.[UniProtKB/Swiss-Prot Function]