

Product datasheet for **MR208933**

Slc5a8 (BC017691) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc5a8 (BC017691) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc5a8
Synonyms:	MGC19357, Ait
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR208933 representing BC017691
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCGGTGCGAGTATGTCGCGCTGCCTGTGGCTCTGTCCCTACCGCCAGCTTCATGTCGCTGTCA
 CTGTCTGGGCACTCCTGCCGAGGTCTACCGTTTTGGGGCGATATTCAGCATCTTTGTCATCACCTACTT
 TTTTGTAGTGGTTATCAGCGCGGAGGTCTTCTTCCAGTGTTCTATAGGCTGGGGATCACCAGCACCTAC
 GAGTATTTGGAACCTTCGATTTAATCGATGCATTCGTCTCTGTGGCACAATCCTCTTCATCGTTCAAACAA
 TTCTGTACACTGGAATTGTGATTTATGCCCTGCTCTGGCTTTGAATCAAGTTACAGGATTTGATCTGTG
 GGGCGCAGTGGTGGCCACAGGGTGGTCTGCACATTCTACTGCACACTGGGCGGTCTTAAAGCAGTTGTC
 TGGACAGATGTTTTCAAGTTGGGATCATGGTGGCTGGATTTGCATCCGTAATTATACAGGCATCAATAA
 CTCAACATGGCATCAATAAGATTTTAAGTGATGCTTTTAAATGGTGAAGATTAACCTTCTGGAATTTTGA
 TCCTAACCTTTGCAAAGACACAGTCTTGGACAATTGTCATTGGAGGGACTTTTACCTGGACCACCATC
 TATGGTGTCAACAGTCCCAAGTCAGAGATATATTTCCGTGTAAGAGCAGACTCCATGCAAAACTGTCCC
 TCTATGTCAACCTTGTGGGCTCTGGGTGATCCTCACCTGCTCCATATTCTGTGGCTTGCCTGTACTC
 CAGATACCGTGAATGTGATCCCTGGACATCTAAGAAAGTGTACGCGATTGACCAGCTTATGCCTATTTG
 GTGTTGGACATTTGAAAAATTACCCTGGTGTTCCCGACTTTTTGTGGCTGCGCTTACAGTGGGACAT
 TAAGCACAGTGTCTCCAGTATCAATGCCTTGGCGGAGTCACCGTGAAGATCTCATCAAAACCCGCTT
 CAAGTCTCTCTCAGAGAAGTCTCTGTCTTGATTTCCCAAGGAATGAGTGTCTGTATGGAGCTCTGTGC
 ATTGGAATGGCTGCCCTGGCATCGCTGATGGGAGCCTTGTACAGGCAGCACTCAGCATATTCGGCATGG
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 CACTGGTCTGTTGGCTGGATTTGCCATTTCCCTTATGGGTAGGAATTGGAGCCAGCTTTACCTCCGCTT
 CCTGAGAGAACCTTACCATTGCCCTTGAACCTATGGCTGTAAACATCACGCACAATGGGTGCGACTGGA
 TGTCAACCACAGAAATGCCATTTTCTACTAGCGCTTTTCAAATACATAATGCGGAAAGGACTCCACTGAT
 GGACAATTGGTATTCAATATCATATCTGTACTTCACTACTATTGGAACGCTGACAACACTGTTTGTGGGG
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 ACTTTTTATCAATTTTATGATGTTTTAAGAAAAGGAATCATGTTTTAACTATAAATTGCATCCTGTGGA
 AGTTGGTGGAAATGATAACCTGCCTTCAACCATGTTGAGCTGAACCTTACAGATCACAGTGGCAAGATC
 AATGGGACTCGCTTG

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208933 representing BC017691
 Red=Cloning site Green=Tags(s)

MGRSMSAVPVALSLTASFMSAVTVLGTPEVYRFGAIFSIFFVITYFFVVVISAEVFLPVFYRLGITSTY
 EYLELRFNRCIRLCGILFIVQITILYTGIVYIYAPALALNQVTGFDLWGAVVATGVVCTFYCTLGGLKAVV
 WTDVVFQVGIMVAGFASVIIQASITQHGINKILSDAFNGGRLNFWNFDPNPLQRHTFWTIVIGGTFWTWTI
 YGVNQSQVQRYISCKSRHLAKLSLYVNLVGLWVILTCIFCGLALYSRYRECDPWTSKKVSAIDQLMPYL
 VLDILKNYPGVPGLFVACAYSGTLSTVSSINALAAVTVEDLIKPRFKSLSEKLSWISQGMSVLYGALC
 IGMAALASLMGALLQAALSIFGMVGGPLLGLFSLGILVPFANSIGALTGLLAGFAISLWVGIGAQLYPPL
 PERTLPLPLETYGCNITHNGSDWMSTTEMPFSTSAFQIHNAERTPLMDNWYSLSYLYFSTIGTLTTLFVG
 ILISLSTGGRKQNLDPRLFTKQDFLSNFDVFKRNHVLNYKLHPVEVGNDNPAFNHVELNFTDHSGKI
 NGTRL

TRTRPLE**QKLISEEDLA**AND**ILDYKDDDDKV**

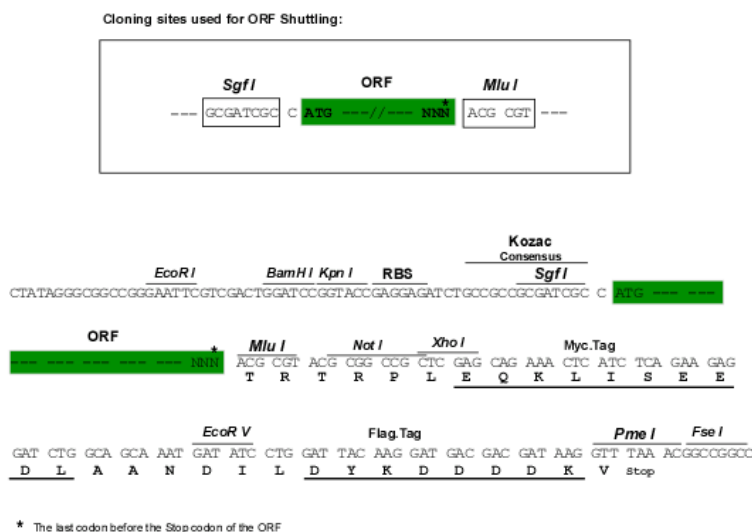
Chromatograms:

https://cdn.origene.com/chromatograms/mm9038_b08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: BC017691

ORF Size: 1695 bp

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.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: BC017691.1

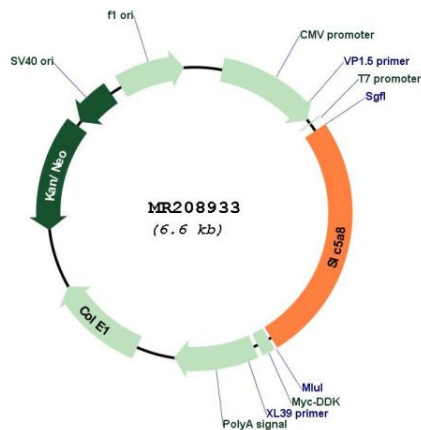
RefSeq Size: 5351 bp

RefSeq ORF: 1697 bp

Locus ID: 216225

Cytogenetics:	10 C1
MW:	196.1 kDa
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]

Product images:



Circular map for MR208933