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Product datasheet for RR208988

Slc8a2 (NM_078619) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc8a2 (NM_078619) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc8a2
Synonyms:	Ncx2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RR208988 representing NM_078619
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCCCTTGGCTTTGGTAGGGGTTGCCCTCCTTCTGGGGGCACCCCACTGCTTGGGGGAAGCTACTC
CGACCCCATCCCTGCCACCTCCCCCAGCTAATGACAGCGATGCCAGCCCAGGCGGCTGCCAAGGTTCCTA
CCGCTGCCAACCAGGGGTGCTGCTGCCTGTGTGGGAACCCGACGACCCATCACTGGGGGACAAGGCTGCA
CGGGCCGTGGTGTACTTTGTGGCCATGGTCTACATGTTCTTGGGTCTGTCTATCATTGCTGATCGTTTTA
TGGCATCCATTGAGGTCATCACATCCAAGGAGAAAGAGATCACCATCACCAAGGCAAATGGGGAGACCAG
CGTGGGCACTGTACGCATCTGGAATGAAACGGTGTCCAACCTTACACTCATGGCCCTGGGCTCCTCAGCA
CCTGAGATTCTGCTGTCTGTCATCGAGGTCTGTGGCCACAACTTCCAGGCGGGTGAGCTAGGCCCAGGCA
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TGAGAGCCGTAAGATCAAGCACTTAAGGGTCTTCTTCGTCACAGCCTCTTGGAGCATCTTTGCCTATGTC
TGGCTTTATCTCATTCTAGCAGTTTTCTCTCCAGGCGTGGTCCAGGTGTGGGAGGCACTGCTCACGCTGG
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GCCTTCTACCGCATCCAGGCCACGCGGCTGATGACAGGTGCGGGCAACGTGCTGCGCCGACACGCTGCGG
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GTGAGCGCAGGGGACGAGGAGGAGGATGAGGATGGGTCTCGTGAGGAGCGGCTGCCATCCTGCTTTGACT
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TGGCTGGGCCTGCTTTGGTGTCTGCATCCTGGTCATTGGTCTGCTCACTGCCCTCATCGGAGACCTGGCC
TCACACTTTGGGTGCACCGTGGGCCTCAAGGACTCAGTCAACGCCGTGGTCTTCGTGGCTCTGGGCACCT
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CGTGACCGGCTCCAATGCGGTGAACGTGTTCCTGGGCCTGGGTGTGGCCTGGTCGGTGGCCGCAGTGTAC
TGGGCGGTGCAGGGTCGCCCCTTCGAGGTGCGTACAGGCACGCTGGCCTTCTCGGTCACACTGTTCACCG
TCTTCGCCTTCGTGGGCATCGCAGTGCTCTTGTACCGGCGCCGGCCACACATCGGCGGCGAGCTGGGCGG
CCCGCGGGGACCCAAGCTAGCCACCACCGCTCTCTTCCTGGGCCTCTGGTTCCTCTACATTCTCTTCGCC
AGCCTGGAGGCTTATTGCCACATTCGGGGCTTC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

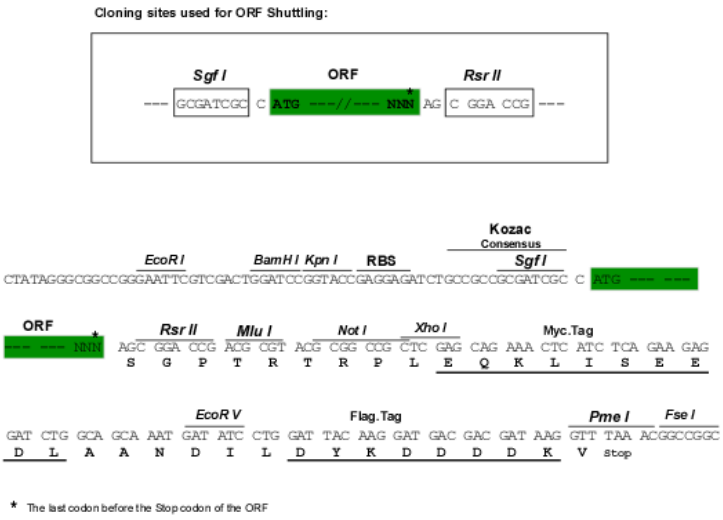
>RR208988 representing NM_078619
Red=Cloning site Green=Tags(s)

MAPLALVGVALLLGAPHCLGEATPTPSLPPPPANDSDASPGGCQGSYRCQPGVLLPVWEPDDPSLGDKAA
RAVVYFVAMVYMFLGLSIIADRFMASIEVITSKEKEITITKANGETSVGTVRIWNETVSNLTLMALGSSA
PEILLSVIEVCGHNFQAGELGPGTIVGSAAFNMFVVIAVCVYVIPAGESRKIKHLRVFFVTASWSIFAYV
WLYLILAVFSPGVVQVWEALLTLVFFPVCVVFAWMADKRLLFYKYVYKRYRTDPRSGIIIGAEGDPPKSI
ELDGTFVGTEVPGELGALGTGPAEARELDASRREVIQILKDLKQKHPDKDLEQLVGIAKYYALLHQQKSR
AFYRIQATRLMTGAGNVLRRHAADAARRPGANDGAPDDEDDGASRIFFEPSLYHCLENCGSVLLSVACQG
GEGNSTFYVDYRTEDGSAKAGSDYEYSEGTLVFKPGETQKELRIGIIDDDIFEEDEHFFVRLLNLRVGDA
QGMFEPDGGGRPKGRLVAPLLATVTILDDDHAGIFSFQDRLLHVSECMGTVDVRVVRSSGARGTVRLPYR
TVDGTARGGGVHYEDACGELEFGDDETMKTLQVKIVDDEEYEKKDNFFIELGQPQWLKRGISALLLNQGD
GDRKLTAEEEEAQRIAEMGKPVLGENCRLEVIIEESYDFKNTVDKLIKKTNLALVIGTHSWREQFLEAVT
VSAGDEEEDEDGSREERLPSCFDYVMHFLTVFWKVLFACLPPTEYCHGWACFGVCILVIGLLTALIGDLA
SHFGCTVGLKDSVNAVVFVALGTSIPDTFASKVAALQDQCADASIGNVTGSNAVNVFLGLGVAWSVAAVY
WAVQGRPFEVRTGTLAFSVTLFTVFAFVGIAVLLYRRRPHIGGELGGPRGPKLATTALFLGLWFLYILFA
SLEAYCHIRGF

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_078619

ORF Size: 2763 bp

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OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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.
RefSeq:	NM_078619.1, NP_511174.1
RefSeq Size:	3004 bp
RefSeq ORF:	2766 bp
Locus ID:	140447
UniProt ID:	P48768
Cytogenetics:	1q21
MW:	100.5 kDa
Gene Summary:	isoform 2 of sodium/calcium exchanger; regulates intracellular calcium levels and maintains calcium homeostasis; may be important for the control of synaptic plasticity [RGD, Feb 2006]

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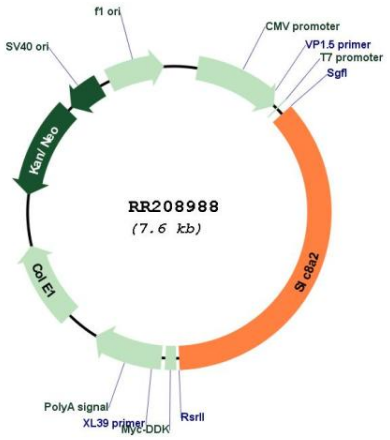
Product images:



Circular map for RR208988

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