

## Product datasheet for RR201621

### Slc12a4 (NM\_019229) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Slc12a4 (NM\_019229) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Slc12a4  
**Synonyms:** Kcc1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR201621 representing NM\_019229  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGGATCGCC

ATGCCTCACTTCACCGTGGTGGCGGTGGACGGGCCGACGCGGGCGACTATGACAACCTCGAGGGGCTCA  
 GTTGGGTGGACTACGGGGAGCGCGCCGAGCGGGAAGACTCGGATGGACAGGGTAACCACAGAGAGAATAG  
 TCCCTTCTTAGCCCTTTGGACGCTCCAGAGGAAATGACTACTATGACCGGAACCTGGCACTGTTGAG  
 GAGGAGCTGGACATCCGCCCAAAGGTATCATCTCTCTGGGCAAGCTTGTAGCTATACCAACCTCACCC  
 AAGGAGCCAAGGAGCACGAGGAAGCTGAGAGTGGAGAAGGTGGCCGTCGGAGAGCCGCCAAGGCACCCAG  
 CATGGGCACCCCTTATGGGAGTGTACCTGCCCTGCCTGCAGAATATCTTCGGGGTCATCTCTCTCGCG  
 CTGACCTGGATGGTGGGCACAGCTGGCGTGTGCAGGCTCTCCTCATTGCTCCTCATCTGTTGCTGCTGTA  
 CCCTGCTGACAGCCATCTCCATGAGTGGCATCGCCACCAATGGTGTGGTCCAGCTGGTGGCTCTTACTT  
 CATGATTTCCCGCTCTTTGGGACCAGAATTCGGAGGTGCTGTGGGCTATGCTTCTACCTGGGGACCACA  
 TTTGAGCAGCCATGTATATCCTAGGAGCCATTGAGATCTTGTGACCTACATTGCTCCACCAGCTGCCA  
 TCTTTTACCCATCGGGCACACAGACATGTCAAGCGCCACCTTGAATAACATGCGGGTGTACGGAACCAT  
 TTTCTGACTTTTCATGACCCTAGTGGTGTGTGCGGTGTCAAGTATGTGAACAAGTTCGCCTCACTCTTC  
 CTGGCCTGTGTGATCATCTCCATCTCCTCCTCATTACGTGGGAGGCATCAAGTCCGCTTTTGACCCTCTG  
 TTTTTCCGGTGTGCATGCTGGGCAATAGGACTCTGTCTCGGGACCAAGTTGACATCTGTGCCAAGACAGT  
 TGTGGTGGACAATGAGACAGTGGCCACCCGGCTGTGGACTTTCTTCTGCCACAGCCCAACCTTACTGCT  
 GACTCCTGTGACCCCTACTTCTGCTCAACAATGTGACAGAGATTCTGGCATACTGGGCAGCTGCTG  
 GTGTGCTCCAGGAAAACCTGTGGAGTGTACCTGGAGAAGGGTGTGGTGTGGAGAAGCATGGGCTGCC  
 CTCCACAGATACCCTTGGCCTGAAGGAGAGCCTGTCCCTGTATGTGGTGGCCGACATCGCCACATCTTC  
 ACCGTGCTGGTTGCATCTTTTCCCTTCTGTAACAGGCATCATGGCTGGCTCAAACCGTTCGGGGGACC  
 TCCGTGATGCTCAGAAGTCTATCCCTGTGGGGACCACTTCTGGCTATTGTACCACCTTCACTCGTGTACTT  
 CAGCAGTGTGATTCTCTCGGTGCTGCATCGAGGGTGTGGTGTCCGGGACAAGTACGGTGTGGCGTC  
 AGCAGGAACCTGGTGGTAGGCACCTTGGCTGGCTTACCTTGGGTTCATCGTGGTGGCTCCTTCTTCT



CAACATGTGGTGCCGGCCTCCAAAGTCTCACTGGGGCGCCACGTTTACTGCAAGCCATTGCCAAGGATAA  
 CATCATCCCCTTCTCCGGGTGTTTGGCCACGGGAAAGCCAATGGTGAGCCAACGTGGGCCCTCCTCCTG  
 ACAGCGCTCATCGCTGAGCTGGGCATCCTCATCGCCTCCCTTGACATGGTGGCCCCATTCTTCCATGT  
 TCTTTCTGATGTGTTACCTCTTTGTAACCTTGGCCTGTGCTGTGCAGACACTTCTGAGGACCCCCAACTG  
 GCGGCCCGGTTCAAGTACTATCACTGGGCGTTGTCTTCTGGGCATGAGTCTGTGCCTGGCTCTCATG  
 TTTGTCTCCTCCTGGTACTACGCCCTAGTGCCATGGTCATCGCAGGCATGATCTACAAGTACATCGAGT  
 ACCAAGGGGTGAGAAGGATGGGGTATGGGATCCGAGGCCTGTCCCTGAGTGCCGCACGATATGCAT  
 GCTGAGACTAGAGGAAGGCCTCCTCACACGAAGAAGTGGCGGCCTCAGCTCCTGGTGTCTGAAGTTA  
 GACGAAGATCTTCATGTGAAGTACCCTCGGCTCCTCACCTTTGCCTCCCAACTTAAGGCTGGGAAAGGCC  
 TGACAATCGTTGGCTCTGTATCCAGGGCAGCTTTCTGGAGAGCTATGGGGAAGCCAGGCTGTGAGCA  
 GACAATCAAGAACATGATGGAGATTGAGAAAGTAAAAGGCTTCTGCCAGGTAGTGGTGGCCAGCAAGGTT  
 CGAGAGGGGTGGCCACCTCATCCAGTCTTGGGCTGGGTGGCATGAGACATAACTCCGTGGTGTGG  
 GCTGGCCCTATGGCTGGCGACAGAGTGAAGACCCAGTGCCTGGAAGACCTTTATCGACACTGTGCGCTG  
 CACCACAGCTGCCACCTGGCCCTGCTGGTGCCAAAGAACATAGCTTTTACCCAGCAACCACGAGCGC  
 TACCTGGAGGGCCACATTGATGTGTGGTGGATCGTGCATGACGGAGGCATGCTGATGCTGTGCCCTTCC  
 TGCTGCGCCAGCATAAGGTTTGGGAAGAAGTGCCGGATGCGCATTTTACCGTGGCCAGATGGACGACAA  
 CAGCATCCAGATGAAGAAGGATCTGGCCATCTTCTGTATCACCTCCGCCTGGAAGCTGAAGTGGAGGTG  
 GTAGAGATGCACAACAGTACATCTCGGCCTACACCTACGAGCGGACACTGATGATGGAGCAGCGGTCTC  
 AAATGCTGCGACAGATGAGGCTGACCAAAAACAGAGCGGGATCGAGAGGCCAGCTGGTGAAGGACAGGCA  
 CTCGGCTCTGAGGCTAGAGAGCCTTACTCCGACGAGGAGGATGAGTCTGTGACAGGCGCTGACAAGATC  
 CAGATGACATGGACCAGAGACAAGTACATGGCTGAACCTGGGACCCAGCCATGCCCTGACAACCTCC  
 GGGAGCTGGTGCACATTAAGCCGGACCAGTCCAATGTGCGGCGTATGCACACTGCTGTGAAGCTCAATGA  
 AGTCAATGTACACGCTCCCATGATGCCGCTGGTCTACTGAACATGCCCGGCCCCCTAAGAACAGT  
 GAGGGTGTGAGAACTACATGGAATTCTTGAAGTCTAACCAGGGCCTGAACGGGTGTTGTTGGTGC  
 GTGGTGGTGGCCGGAAGTCATACCATCTATTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR201621 representing NM\_019229  
 Red=Cloning site Green=Tags(s)

MPHFTVVPVDGPRRGDYDNLLEGLSWVDYGERAEREDSDGQGNHRENSPFLSPLDASRNDYYDRNLALFE  
 EELDIRPKVSSLLGKLVSYTNLTQAKEHEEAESGEGRRRAAKAPSMGTLMGVYLPCLQNIQIFGVILFLR  
 LTMVGTAGVLQALLIVLICCCCTLLTAISMSAIATNGVVPAGGSYFMISRSLGPEFFGGAVGLCFYLGTT  
 FAAAMYILGAIEILLTYIAPPAIFYPSTGTHDMSSATLNNMRVYGTIFLTFMTLVFVGVKYNKFAFLF  
 LACVIIISILSIYVGGIKSAFDPPVFPVCM LGNRTL SRDQFDICAKTVVDNETVATRLWTFCHSPNLTA  
 DSCDPYFLLNNVTEIPGIPGAAAGVLQENLWSAYLEKGEVVEKHGLPSTDTLGLKESLSLYVADIATSF  
 TVLVGIFFPSVTGIMAGSNRSGDLRDAQSIPVGTILAIVTTSLVYFSSVILFGACIEGVLRDKYGDGV  
 SRNLVVGTLAWPSPWIVVGSFFSTCGAGLQSLTGAPRLLQAIKDNIIPFLRVFVGHGKANGIPTWALLL  
 TALIAELGILIASLDMVAPILSMFFLMCYL FVNLA CAVQTLRLTPNWRPRFKYYHWALSFLGMSLCLALM  
 FVSSWYYALVAMVIAGMIYKYIEYQGAKEWGDGIRGLSL SAARYALLRLEEGPHTKNWRPQLLVLLKL  
 DEDLHVKYPRLLTFASQLKAGKGLTIVGSIQGSFLESYGEAQAAEQTIKNMMEIEKVKGFCQVVVASKV  
 REGLAHLIQSCGLGGMRHNSVVLGWPYGWRQSEDPRAWKTFIDTVRCTTAAHLALLVPKNIAFYPSNHER  
 YLEGHIDVWVIVHDGGMMLLLPFLLRQHKVWKKCRMRIFTVAQMDDNSIQMKDLAIFLYHLRLEAEVEV  
 VEMHNSDISAYTYERTLMMEQRSQMLRQMLR TKTERDREAQLVKDRHSALRLESLSYDDEESVTGADKI  
 QMTWTRDKYMAEPWDP SHAPDNFREL VHIKPDQSNVRRMHTAVKLENEIVTRSHDARLVLLNMPGPPKNS  
 EGDENYMEFLEVLTEGLERVLLVRGGREVITIYS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

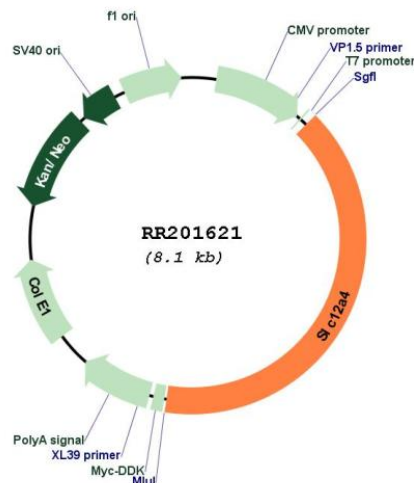
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_019229

ORF Size: 3255 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_019229.2, NP_062102.1</u>
<b>RefSeq Size:</b>	3724 bp
<b>RefSeq ORF:</b>	3258 bp
<b>Locus ID:</b>	29501
<b>UniProt ID:</b>	<u>Q63632</u>
<b>Cytogenetics:</b>	19q12
<b>MW:</b>	120.6 kDa
<b>Gene Summary:</b>	may act as a potassium-chloride cotransporter [RGD, Feb 2006]