

## Product datasheet for RC228638

### SLC12A4 (NM\_001145962) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC12A4 (NM_001145962) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC12A4
Synonyms:	CTC-479C5.17; hKCC1; KCC1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC228638 representing NM_001145962 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCGAGCGGGCGGGCGTGTGGCCCGGGCGGGGACAGCGCGGGGACAGCGCGGGCGGGCTGGG  
ACGGCGGGTGCAGCGGGCCGAGCCCGCAGATGCCTCACTTCACCGTGGTCCAGTGGACGGGCCGAGG  
CGCGGGCGACTATGACAACCTCGAGGGGCTCAGTTGGGTGGACTACGGGGAGCGCGCCGAGCTGGATGACT  
CGGACGGAAGAGCTGGACATCCGCCAAAGGTATCGTCTCTTCTGGGAAAGCTCGTCAGCTACACCAACC  
TCAACCCAGGGCGCCAAAGAGCATGAGGAGGCCGAGAGTGGGGAGGGCACCCGCGGAGGGGAGCCGAGGC  
ACCCAGCATGGGCACCCTCATGGGGGTGTACCTGCCCTGCCTGCAGAATATCTTTGGGGTTATCCTCTTC  
CTGCGGCTGACCTGGATGGTGGGCACAGCAGGTGTGCTACAGGCCCTCCTCATCGTGCTTATCTGCTGCT  
GTTGTACCCTGCTGACGGCCATCTCCATGAGTGCCATCGCCACCAACGGTGTGGTCCAGCTGGGGGCTC  
CTATTTTCATGATCTCTCGTTCACTGGGGCCAGAATTTGGAGGTGCTGTGGGCCTGTGCTTCTACCTGGGA  
ACAACATTCGCAGCAGCCATGTACATCCTGGGGCCATCGAGATCTTGCTGACCTACATAGCCCCACCAG  
CTGCCATTTTTTACCATCGGGTGTCTGACACGTGCAATGCCACTTTGAACAATATGCGTGTGTATGG  
GACCATTTTCTGACCTTCATGACCCTGGTGGTGTGGGGGTCAAGTATGTGAACAAATTTGCCTCG  
CTCTTCTGCGCTGTGTGATCATCTCCATCCTCTCCATCTATGCTGGGGGCATAAAGTCTATATTTGACC  
CTCCCGTGTTCGGTATGCATGCTGGGCAACAGGACCCTGTCCCGGGACCAGTTTGACATCTGTGCCAA  
GACAGCTGTAGTGGAATGAGACAGTGGCCACCAGCTATGGAGTTTCTTCTGCCACAGCCCCAACCTT  
ACGACCGACTCCTGTGACCCCTACTTCATGCTCAACAATGTGACCGAGATCCCTGGCATCCCCGGGGCAG  
CTGCTGGTGTGCTCCAGGAAAACCTGTGGAGCGCCTACCTGGAGAAGGGTACATCGTGGAGAAGCATGG  
GCTGCCCTCCGAGATGCCCGAGCCTGAAGGAGAGCCTGCCTCTGTACGTGGTTCGCTGACATCGCCACA  
TCCTTCACCGTGTGGTGGCATCTTCTCCCTCTGTAAACAGGCATCATGGCTGGCTCAAACCGCTCTG  
GGGACCTTCGTGACGCCAGAAGTCTATCCCTGTGGGGACCATTCTGGCCATCATTACAACCTCCCTCGT  
GTACTTCAGCAGTGTGGTCTCTTTGGTGCCTGCATTGAGGGTGTGGTCTCCGGGACAAGTATGGCGAT  
GGTGTGACAGGAACTTGGTGGTGGGCACACTGGCCTGGCCTTACCCTGGGTCATCGTCATCGGCTCCT



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TCTTTTCAACGTGTGGCGCTGGCCTCCAGAGCCTCACAGGGGCACCACGCCTATTGCAGGCCATTGCCAA  
 GGACAACATCATCCCCTTCTCCGGGTGTTTGGCCACGGGAAGGTGAATGGTGAACCCACATGGGCACTC  
 TCCTGACGGCACTCATCGCCGAGCTGGGCATCCTCATCGCCTCCCTCGACATGGTGGCCCCATCTTAT  
 CCATGTTCTTTCTGATGTGCTACCTGTTCTGTGAACCTCGCCTGTGCGGTGACGACACTCTGAGGACCCC  
 CAACTGGCGGCCCGGTTCAAGTACTATCACTGGGCGCTGTCTTCTGGGCATGAGTCTCTGCCTGGCC  
 CTTATGTTTGTCTCCTCCTGGTACTATGCCCTGGTGGCCATGCTCATCGCCGGCATGATCTACAAATACA  
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 GCGCTGCACTACGGCTGCCACCTGGCCCTGCTCGTGCCCAAGAACATCGCCTTCTACCCAGCAACCAC  
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 CCTTCTGCTGCCAGCATAAGGTCTGGAGGAAGTGCCGGATGCGCATCTTACAGTGGCCAGATGGA  
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 GAGGTGGTGGAGATGCATAACAGTGACATCTCTGCATACACCTACGAGCGGACGCTGATGATGGAGCAGC  
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 CAATGAAGTCATTGTACGCGCTCCACGACGCGCCCTGGTTCTCCTAAACATGCCTGGCCACCAGG  
 AACAGTGAAGGGCAGGAACTACATGGAGTTCTCGAGGTGCTGACCGAGGGCCTTGAGCGGGTGTGT  
 TGGTGGCGGTTGGTGGCCGTGAAGTCATCACCATCTACTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC228638 representing NM\_001145962  
 Red=Cloning site Green=Tags(s)

MRAGGACRPGAAGTAAGTAAGGWDGCGGAEPARCLTSPWCQWTGRGAATMTTSRGSVWTTGSAPSWM  
 RTEELDIRPKVSSLLGKLVSYTNLTQGAKEHEEAESGEGTRRRAAEAPSMGTLMGVYLPCLQNIQIFGVILF  
 LRLTWMVGTAGVLQALLIVLICCCCTLLTAISMSAIATNGVVPAGGSYFMI SRSLGPEFGGAVLGFYLG  
 TTFAAAMYILGAIEILLTYIAPPAAIFYPGSAHDTSNATLNNMRVYGTIFLTFMTLVVFGVKYVNFAS  
 LFLACVILSILSIYAGGIKSIFFPPVFPVCM LGNRTL SRDQFDICAKTAVVDNETVATQLWSFFCHSPNL  
 TTDSCDPYFMLNNVTEIPGIPGAAAGVLQENLWSAYLEKGDIVEKHGLPSADAPSLKESLPLYVADIAT  
 SFTVLVGIFFPSVTGIMAGSNRSGDLRDAQKSIPVGTILAIITTSLVYFSSVVLFGACIEGVVLRDKYGD  
 GVSRLVVGTLAWPSPWVIVIGSFFSTCGAGLQSLTGAPRLLQAI AKDNIIPFLRVF GHGKVNGEPTWAL  
 LLTALIAELGILIASLDMVAPILSMFFLMCYL FVNLACAVQTLRLTPNWRPRFKYHVALSFLGMSLCLA  
 LMFVSSWYYALVAML IAGMIYKYIEYQGAKEWGDGIRGLSL SAARYALLRLEEGPPHTKNWRPQLLVLL  
 KLDEDLHVKYPRLLTFASQLKAGKGLTIVG SVIQGSFLESYGEAQAEEQTIKNMMEIEKVKGFCQVVVAS  
 KVREGLAHLIQSCGLGMRHNSVVLGWPYGWRQSEDPRAWKTFIDTVRCTTAAHLALLVPKNIAFYPSNH  
 ERYLEGHIDVWWIVHDGGM LMLLPFLLRQHKVWRKCRMRI FTVAQMDDNSIQMKKDLAVFLYHLRLEAEV  
 EVVEMHNSDISAYTYERTLMMEQRSQMLRQMRLTKTEREREQLVKDRHSALRLESLSYDEEDESAVGAD  
 KIQMTWTRDKYMTETWDPSHAPDNFREL VHIKPDQSNVRRMHTAVKLVNEVIVTRSHDARLVLLNMPGPPR  
 NSEGDENYMEFLEVLTEGLERVLLVRGGGREVITIYS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

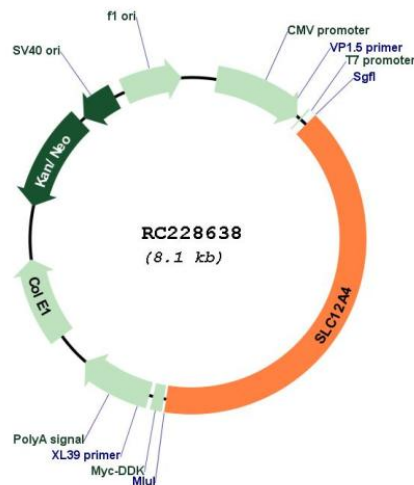
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001145962

ORF Size: 3261 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><a href="#">NM_001145962.1</a></u> , <u><a href="#">NP_001139434.1</a></u>
<b>RefSeq ORF:</b>	3264 bp
<b>Locus ID:</b>	6560
<b>UniProt ID:</b>	<u><a href="#">Q9UP95</a></u>
<b>Cytogenetics:</b>	16q22.1
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	119.6 kDa
<b>Gene Summary:</b>	This gene encodes a member of the SLC12A transporter family. The encoded protein mediates the coupled movement of potassium and chloride ions across the plasma membrane. This gene is expressed ubiquitously. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jan 2013]