

## Product datasheet for RC214022

### SLC12A6 (NM\_133647) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC12A6 (NM_133647) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC12A6
Synonyms:	ACCPN; KCC3; KCC3A; KCC3B
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC214022 representing NM_133647 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCATCTCCAGAAACCACCACCAAGATGGCTTCAGTTCGGTTCATGGTGACACCGACAAAGATCGATG  
ACATTCAGGTTTGTGACACACCAGTCCGGACCTCAGCTCTCGATCTAGTTCGAGTAAGATTTAGCTC  
CCGGGAAAGCGTGCCTGAAACAAGCCGGAGTGAGCCTATGAGTGAGATGTCTGGGGCCACCCTTCGCTG  
GCAACTGTTGCACTGGATCCACCAGTACCAGGACTTCTACCCCCAGGATGTCATCGAGGACCTGAGTC  
AGAACTCCATCACAGGGGAACACAGCCAACTGTTAGACGACGGACATAAGAAAGCTCGAAATGCTTATCT  
CAATAATTCCAATTATGAAGAAGGAGATGAATATTTTGATAAAAAATTTGGCACTCTTTGAGGAAGAAATG  
GACACCAGACCGAAGGTGTCTTCCCTCCTCAACCCGATGGCCAATTACACTAATCTGACTCAAGGAGCAA  
AGGAACATGAAGAGGCAGAAAACATCACTGAAGGGAAAAAGAAGCCACCAAGACCCCCAAATGGGTAC  
CTTCATGGGTGTCTACCTCCCATGTCTACAAAAATTTTTGGAGTGATCCTTTTTTACGCCTTACATGG  
GTGGTGGGCACAGCTGGAGTCTTCAGGCTTTTGCAATTGCTTATCTGCTGCTGTACAATGTTGA  
CTGCTATCTCCATGAGTGCCATTGCCACTAATGGAGTGGTCCAGCTGGGGCTCATACTTTATGATTTC  
CCGGGCACTGGGCCAGAGTTTGGTGGGCTGTTGGCCTCTGCTTTTATCTTGGTACCACATTTGCAGCA  
GCCATGTACATCCTTGGTGCCATTGAAATCTTTCTGGTCTATATCGTCCCCGAGCTGCCATCTTTCACA  
GTGATGACGCACTCAAGGAATCAGCAGCCATGCTAAATAACATGCGTGTCTACGGCACAGCTTCTTGGT  
CCTTATGGTATTAGTGGTATTTATCGGCGTACGCTATGTGAACAAGTTTGCCTCACTTTTCTGGCCTGT  
GTCATTGTGTCCATCTTGGCCATCTATGCTGGAGCCATCAAGTCTTCTTTTGTCTCTCCACTTCCCGG  
TCTGCATGCTGGTAACCGCACCTTTTCATCAAGACACATTGACGTTTGTCTAAGACCAAGGAAATTA  
CAACATGACAGTCCCATAAAGTTATGGGATTCTTCTGTAACCTCGAGTCAATTTTTCAATGCCACCTGT  
GATGAATACTTTGTTACAATAACGTCCTTCAATCCAGGGCATTCTGGATTGGCTAGTGGTATAATTA  
CAGAGAATCTTTGGAGTAATTACCTACCAAGGGAGAGATCATCGAAAAGCCTTCAGCCAAATCTTCTGA  
TGCTTAGGCAGCTTAAACCATGAATATGTTCTTGTGACATCACACCTCCTTCACGCTTCTGGTGGGA  
ATCTTCTTCCCTCTGTTACAGGTATCATGGCTGGATCAAACAGATCTGGAGATCTGAAAGATGCTCAGA



[View online >](#)

AGTCTATTCCGATTGGTACTATCCTTGCCATCCTGACCACCTCCTTTGTTATTTAAGCAATGTTGCCT  
TTTTGGTGCATGTATTGAAGGGTTGTTCTCAGAGACAAGTTCGGTGATGCTGTGAAAGTAATTTGGT  
GTAGGCACCTTATCTTGGCCATCCCATGGGTGATTGTTATTGGCTCCTTCTTTCAACATGTGGGGCTG  
GACTTCAGAGCCTCACAGGTGCACCGAGGCTGCTACAAGCTATTGCCAAGGATAACATCATACCGTTTCT  
GAGGGTTTTTGGCCACAGCAAAGCCAATGGGGAACCTACCTGGGCTTTACTTCTAACTGCTGCCATTGCA  
GAGCTTGAATACTCATTGCCTCCCTGGATCTTGTGGCCCAATCTTTCCATGTTTTTCTCATGTGTT  
ACCTCTTTGTAACTTGGCATGTGCCTTGCAAACATTACTTCGAACACCCAAGTGGAGACCCCGATTCCG  
CTACTACCATTGGGCCCTTTCTTTCATGGGAATGAGTATCTGTCTGGCTCTGATGTTTCTTCTCCTGG  
TATTATGCCATTGTAGCCATGGTAATAGCTGGTATGATCTACAAGTACATTGAATACCAAGGAGCTGAGA  
AAGAATGGGGTGTGGTATCCGTGGGCTGTCCCTCAGTGCAGCCCGTTTGTCTTCTCGATTGGAGGA  
AGGACCTCCACACTAAAACTGGAGGCTCAGTTGCTTGATTACTGAACTAGATGAAGACTTACAT  
GTCAAGCATCCTCGCTCCTCACCTTGGCTCACAGCTCAAAGCAGGAAAAGGTCTCACTATTGTGGCT  
CTGTATCGTGGGAACCTCCTAGAGAACTACGGTGAAGCTTTAGCTGCTGAGCAGACCATAAAGCACCT  
AATGGAGGCAGAGAAGGTAAAAGGATTCTGCCAGCTGGTGGTGGCCGCAAGCTGAGAGAGGGCATTTC  
CACCTCATCCAGTCATGTGGCTTGGGGCATGAAGCACAACACGGTGGTATGGCTGGCCTAATGGCT  
GGCGTCAAAGCGAAGATGCCCGCTTGAAGACTTTTATTGGCACAGTTCGAGTGACAACCTGCTGCCCA  
TCTTGCCTGCTGGTGGCTAAAAACATCTCCTTCTTCCAGCAATGTGGAGCAATTTTCTGAGGGCAAC  
ATTGATGTGTGGTGGATTGTGCATGATGGGGGATGCTTATGCTACTACCATTCTACTGAAACAGCACA  
AGGTGTGGCGAAAGTGCAGCATACGGATCTTACAGTAGCCCAATTAGAAGACAACAGTATCCAAATGAA  
GAAGGACCTAGCCACCTTCTATATCACTTACGCATTGAGGCGGAGGTAGAAGTGGTGGAGATGCATGAC  
AGTGATATATCAGCATATACTTACGAGCGCACTTTGATGATGGAACAAAGTCCCAGATGCTCCGGCACA  
TGCGGCTATCCAAAACAGAGCGAGACAGAGAGGCACAATTGGTGAAGACCGAAACTCAATGCTACGATT  
GACCAGCATTGGCTCTGATGAGGACGAAGAGACAGAAACCTATCAGGAGAAGGTGCACATGACTTGGACA  
AAAGACAAGTACATGGCATCCCGGGGACAAAAGCGAAGTCAATGGAAGGATTCCAGGACCTGCTTAACA  
TGCGTCCGGACCAGTCCAATGTGAGGCGGATGCATACAGCAGTGAACCTAACGAGGTTATAGTTAACAA  
GTCCCATGAAGCAAAGCTGGTTTTATTGAATATGCCAGGGCCACCCGAAACCCTGAGGGTATGAAAAC  
TACATGGAGTTCTAGAGGTGCTTACCGAGGGACTAGAGCGAGTCTACTTGTCCGGGTGGTGGCAGTG  
AAGTGATCACCATTTATTCA

ACGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214022 representing NM\_133647  
 Red=Cloning site Green=Tags(s)

MHPPETTTKMASVRFMVTPTKIDDIPGLSDTSPDLSSRSSRVRFSSRESVPETSRSEPMSEMGGATTSL  
 ATVALDPPSDRTSHPQDVIEDLSQNSITGEHSQLLDDGHKKARNAYLNNSNYEEGDEYFDKNLALFEEEM  
 DTRPKVSSLLNRMANYSNLTQGAKEHEEAENITEGKKKPTKTPQMGTFMGVYLPCLQNIQIFGVILFLRLTW  
 VVGTAGVLQAFVILICCCCTMLTAISMSAIATNGVVPAGGSYFMISRALGPEFGGAVGLCFYLGTTFAA  
 AMYILGATIEIFLVYIVPRAAIFHSDALKESAAMLNMRVYGTAFVLVLMVLVVFVIGVRYVNFASFVFLAC  
 VIYSILAIYAGAIAKSSFPHPFVCMGNRTLSSRHIDVCSKTKEINNMTVPSKLVGFFCNSSQFFNATC  
 DEYFVHNNVTSIQGIPGLASGIIITENLWSNYLPKGEIEKPSAKSSDVLGSLNHEYVLDITTSFTLLVG  
 IFFPSVTGIMAGSNRSGDLKDAQKSIPIGTILAILTTSFVYLSNVVLFACIEGVVLRDKFGDAVKGNLV  
 VGTLSWSPWPVIVIGSFFSTCGAGLQSLTGAPRLLQAIKDNIIPFLRVFGHSGKANGPTWALLLTAIA  
 ELGILIASLDLVAPILSMFFLMCYLNVNLACALQTLRLTPNWRPRFRYYHWALSFMGMSICLALMFISSW  
 YYAIVAMVIAGMIYKYIEYQGAKEWGDGIRGLSLSAARFALLRLEEGPHTKNWRPQLLVLLKLEDDLH  
 VKHPRLLTFASQLKAGKGLTIVGSVIVGNFLENYGEALAAEQTIKHLMEAEKVKGFCQLVVAALKREGIS  
 HLIQSCGLGGMKHTVVMGWPNQWRSQSEDARAWKTFIGTVRVTTAAHLALLVAKNISFFPSNVEQFSEGN  
 IDVWWIVHDGGMMLLPFLKQHKVWRKCSIRIFTVAQLEDNSIQMKDLATFLYHLRIEAEVEVEMHD  
 SDISAYTYERTLMMEQRSQMLRHMRLSKTERDREAQLVKDRNSMLRLTSIGSDEDEETETEQEKVHMTWT  
 KDKYMASRGQKAKSMEGFQDLLNMRPDQSNVRRMHTAVKLNEVIVNKSHEAKLVLLNMPGPPRNPEGDEN  
 YMEFLEVLTEGLERVLLVRGGGSEVITIYS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

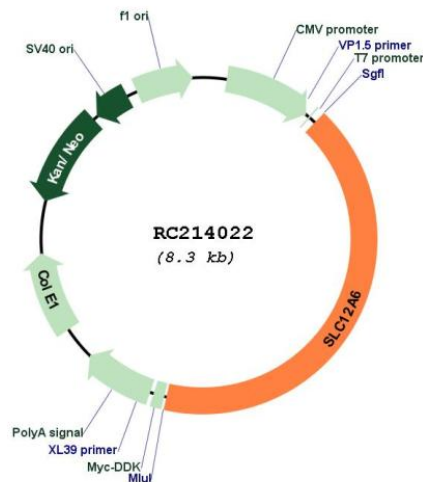
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_133647

ORF Size: 3450 bp

**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](mailto: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\\_133647.1](#), [NP\\_598408.1](#)

RefSeq Size: 7502 bp

RefSeq ORF: 3453 bp

Locus ID: 9990

UniProt ID: [Q9UHW9](#)

Cytogenetics: 15q14

Protein Families: Transmembrane

MW: 127.4 kDa

**Gene Summary:** This gene is a member of the K-Cl cotransporter (KCC) family. K-Cl cotransporters are integral membrane proteins that lower intracellular chloride concentrations below the electrochemical equilibrium potential. The proteins encoded by this gene are activated by cell swelling induced by hypotonic conditions. Alternate splicing results in multiple transcript variants encoding different isoforms. Mutations in this gene are associated with agenesis of the corpus callosum with peripheral neuropathy. [provided by RefSeq, Jul 2008]