

Product datasheet for RC214194

SLC12A6 (NM_001042497) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC12A6 (NM_001042497) 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: >RC214194 representing NM_001042497
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCATCCTCCAGAAACCACCACCAAGATGGCTTCAGTTCGGTTCATGGTGACACCGACAAAGATCGATG
 ACATTCAGGTTTGTGACACACCAGTCCGGACCTCAGCTCTCGATCTAGTTCGGAGTAAGATTTAGCTC
 CCGGAAAGCGTGCCTGAAACAAGCCGGAGTGAGCCTATGAGTGAGATGTCTGGGGCCACCCTTCGCTG
 GCAACTGTTGCACTGGATCCACCCAGTGACCGGACTTCTACCCCCAGGATGTCATCGAGGACGACGGAC
 ATAAGAAAGCTCGAAATGCTTATCTCAATAATTCCAATTATGAAGAAGGAGATGAATATTTTGATAAAAA
 TTTGGCACTCTTTGAGGAAGAAATGGACACCAGACCGAAGGTGTCTTCCCTCCTCAACCGCATGGCCAAT
 TACACTAATCTGACTCAAGGAGCAAAGGAACATGAAGAGGCAGAAAACATCACTGAAGGGAAAAAGAAGC
 CCACCAAGACCCCCAAATGGGTACCTTCATGGGTGTCTACCTCCCATGTCTACAAAATATTTTGGAGT
 GATCCTTTTTTACGCCTTACATGGGTGGTGGGCACAGCTGGAGTTCCTCAGGCTTTTGAATTGTCTT
 ATCTGCTGCTGTACAATGTTGACTGCTATCTCCATGAGTGCCATTGCCAATAATGGAGTGGTGCCAG
 CTGGGGGCTCATACTTTATGATTTCCCGGCACCTGGGCCAGAGTTTGGTGGGGCTGTGGCCTCGCTT
 TTATCTTGGTACCACATTTGCAGCAGCCATGTACATCCTTGGTGCCATTGAAATCTTTCTGGTCTATATC
 GTCCCCGAGCTGCCATCTTTCACAGTGATGACGCACTCAAGGAATCAGCAGCCATGCTAAATAACATGC
 GTGTCTACGGCACAGCTTTCTTGGTCTTATGGTATTAGTGGTATTTATCGGCGTACGCTATGTGAACAA
 GTTTGCCCTCACTTTTCTGGCCTGTGTCATTGTGTCCATCTTGGCCATCTATGCTGGAGCCATCAAGTCT
 TCTTTTGTCTCCTCCACACTTCCCGGTCTGCATGCTGGTAACCGCACCTTTTCATCAAGACACATTGACG
 TTTGCTAAGACCAAGGAAATTAACAACATGACAGTCCCATCAAAGTTATGGGGATTCTCTGTAACCT
 GAGTCAATTTTTCAATGCCACCTGTGATGAATACTTTGTTCAACAATAACGTCACCTCAATCCAGGGCATT
 CCTGGATTGGCTAGTGGTATAATTACAGAGAATCTTTGGAGTAATTACCTACCCAAGGGAGAGATCATCG
 AAAAGCCTTCAGCCAAATCTTCTGATGTCTTAGGCAGCTTAAACCATGAATATGTTCTTGTGACATCAC
 CACCTCCTTCACGCTTCTGGTGGGAATCTTCTTCCCTCTGTTACAGGTATCATGGCTGGATCAAACAGA
 TCTGGAGATCTGAAAGATGCTCAGAAGTCTATTCCGATTGGTACTATCTTGCCATCCTGACCACCTCCT



[View online >](#)

TTGTTTATTTAAGCAATGTTGTCCTTTTTGGTGCATGTATTGAAGGGGTTTCTCAGAGACAAGTTCGG
 TGATGCTGTGAAAGGTAATTTGGTGGTAGGCACCTTATCTTGGCCATCCCCATGGGTGATTGTTATTGGC
 TCCTTCTTTTCAACATGTGGGGCTGGACTTCAGAGCCTCACAGGTGCACCGAGGCTGCTACAAGCTATTG
 CCAAGGATAACATCATACCGTTTCTGAGGGTTTTGGCCACAGCAAAGCCAATGGGGAACCTACCTGGGC
 TTTACTTCAACTGCTGCCATTGCAGAGCTTGAATACTCATTGCCTCCCTGGATCTTGTGGCCCAATT
 CTTTCCATGTTTTTCTCATGTGTACCTCTTTGTAACCTGGCATGTGCCTTGCAAACATTACTTCGAA
 CACCCAACCTGGAGACCCGATTCCGCTACTACCATTGGGCCCTTCTTTTATGGAATGAGTATCTGTCT
 GGCTCTGATGTTCTTTCTCTGGTATTAGCCATTGTAGCCATGGTAATAGCTGGTATGATCTACAAG
 TACATTGAATACCAAGGAGCTGAGAAAGAATGGGGTATGGTATCCGTGGGCTGTCCCTCAGTGCAGCCC
 GGTGTTGCTTTCGATTGGAGGAAGGACCTCCACACTAAAACTGGAGGCCTCAGTTGCTTGTATT
 ACTGAAACTAGATGAAGACTTACATGTCAAGCATCCTCGCTCCTCACCTTTGCCTCACAGCTCAAAGCA
 GGAAAAGGTCTCACTATTGTGGGCTCTGTCATCGTGGGAACTTCTAGAGAACTACGGTGAAGCTTTAG
 CTGCTGAGCAGACCATAAAGCACCTAATGGAGGCAGAGAAGGTAAGGATTCTGCCAGCTGGTGGTGGC
 CGCAAGCTGAGAGAGGGCATTCCACCTCATCCAGTCATGTGGCCTTGGGGCATGAAGCACAACACG
 GTGGTGTGGGCTGGCCTAATGGCTGGCGTCAAAGCGAAGATGCCCGCGCTTGAAGACTTTTATTGGCA
 CAGTTCGAGTGACAACCTGCTGCCATCTTGCACTGCTGGTGGCTAAAAACATCTCCTTCTTCCAGCAA
 TGTGGAGCAATTTCTGAGGGCAACATTGATGTGTGGTGGATTGTGCATGATGGGGGATGCTTATGCTA
 CTACCTTCTACTGAAACAGCACAAGGTGTGGCGAAAGTGCAGCATACGGATCTTACAGTAGCCCAAT
 TAGAAGACAACAGTATCCAAATGAAGAAGGACCTAGCCACCTTCTATATCACTTACGCATTGAGGCGGA
 GGTAGAAGTGGTGGAGATGCATGACAGTATATCAGCATATACTTACGAGCGCACTTTGATGATGGAA
 CAAAGGTCCAGATGCTCCGGCAGATGCGGCTATCCAAAACAGAGCGAGACAGAGAGGCACAATTTGGTGA
 AAGACCGAAACTCAATGCTACGATTGACCAGCATTGGCTCTGATGAGGACGAAGAGACAGAAACCTATCA
 GGAGAAGTGCACATGACTTGGACAAAAGACAAGTACATGGCATCCCGGGGACAAAAGCGAAGTCAATG
 GAAGGATTCAGGACCTGCTTAACATGCGTCCGGACCAAGTCCAATGTGAGGCGGATGCATACAGCAGTGA
 AACTCAACGAGGTTATAGTTAACAAGTCCCATGAAGCAAAGCTGGTTTTATTGAATATGCCAGGGCCACC
 CCGAAACCCTGAGGGTGTGAAAACACATGGAGTTCTAGAGGTGCTTACCGAGGGACTAGAGCGAGTC
 CTACTTGTCCGGGTGGTGGCAGTGAAGTATCACCATTATTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214194 representing NM_001042497
 Red=Cloning site Green=Tags(s)

MHPPETTTKMASVRFMVPTPKIDDIPGLSDTSPDLSSRSSRVRFSSRESVPETSRSEPMSEMSGATTS
 ATVALDPPSDRTSHPQDVEDDGHKKARNAYLNNSNYEEGDEYFDKNLALFEEEMDRPKVSSLLNRMAN
 YTNLTQGAKEHEEAENITEGKKKPTKTPQMGTFMGVYLPCLQNIQFVILFLRLTWVVGTAGVLQAFIVL
 ICCCTMLTAISMSAIATNGVVPAGGSYFMISRALGPEFGGAVGLCFYLGTTFAAAMYILGAIIEIFLVYI
 VPRAAIFHSDDALKEAAMLNMRVYGTAFLLVLMVLVVFJGVRYVKNFASLFLACVIVSILAIYAGAIKS
 SFAPPHFPVCMLGNRTLSSRHIDVCSKTKIENMTVPSKLGWFFCNSSQFFNATCDEYFVHNNVTSIQGI
 PGLASGIITENLWSNYLPKGEIEKPSAKSSDVLGSLNHEYVLVDITTSFTLLVGIFFPSVTGIMAGSNR
 SSDLKDAQKSIPIGTILAILTTSFVYLSNVVLFACIEGVVLRDKFGDAVKGNL VVGTLSWSPSPWVIVIG
 SFFSTCGAGLQSLTGAPRLQAIKDNIPFLRVFGHSKANGEPTWALLTAAIAELGILIASLDLVAPI
 LSMFLLMICYLFVNLACALQTLRTPNWRPRFRYHWHALSFMGMSICLALMFISSWYAIIVAMVIAGMIYK
 YIEYQGAKEKEWGDGIRGLSLSAARFALLRLEEGPPHTKNWRPQLLVLLKLDLHVKHPRLLTFASQLKA
 GKGLTIVGSVIVGNFLENYGEALAAEQTIKHLMEAEKVKGFQLVVAAKLREGISHLIQSCGLGGMKHN
 TVMGPNGWRQSEARAWKTFIGTVRVTTAAHLALLVAKNISFFPSNVEQFSEGNIDVWVI VHDGMLML
 LPFLLKQHKVWRKCSIRIFTVAQLEDNSIQMKDLATFLYHLRIEAEVEVEMHDSISAYTYERTLMME
 QRSQMLRHMRLSKTERDREAQLVKDRNSMLRLTSGSDEDEETETQEKVHMTWTKDKYMASRGQKAKSM
 EGFQDLLNMRPDQSNVRRMHTAVKLNEVIVNKSHEAKLVLLNMPGPPRNPEGDENYMEFLEVLTEGLERV
 LLVRGGGSEVITIYS

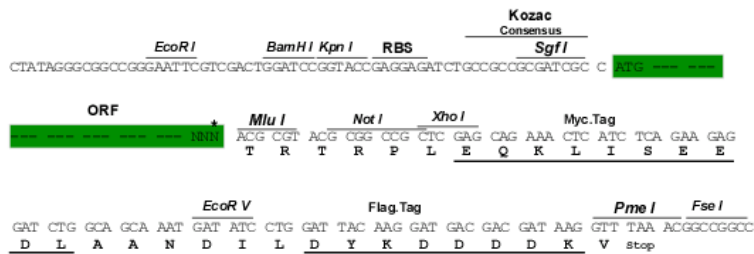
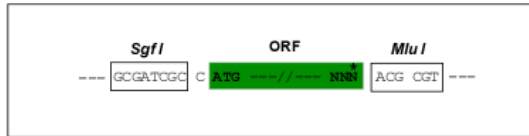
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

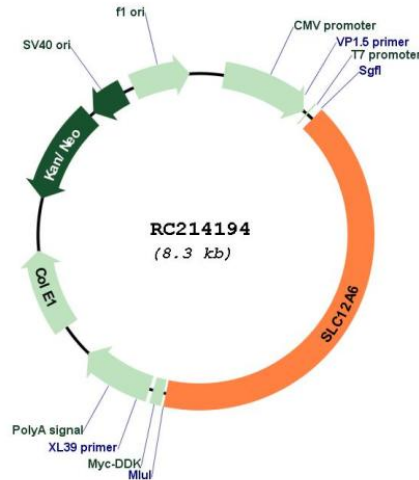
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001042497

ORF Size: 3405 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.

RefSeq: [NM_001042497.2](#)

RefSeq Size: 7457 bp

RefSeq ORF: 3408 bp

Locus ID: 9990

UniProt ID: [Q9UHW9](#)

Cytogenetics: 15q14

Protein Families: Transmembrane

MW: 125.8 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]