

## Product datasheet for **RG214022**

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SLC12A6 (NM\_133647) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** SLC12A6  
**Synonyms:** ACCPN; KCC3; KCC3A; KCC3B  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG214022 representing NM\_133647  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCATCTCCAGAAACCACCACCAAGATGGCTTCAGTTCGGTTCATGGTGACACCCGACAAAGATCGATG  
ACATTCAGGTTTGTGACACACAGTCCGGACCTCAGCTCTCGATCTAGTTCCCGAGTAAGATTTAGCTC  
CCGGGAAAGCGTGCTGAAACAAGCCGGAGTGAGCCTATGAGTGAGATGTCTGGGGCCACCACTTCGCTG  
GCAACTGTTGCACTGGATCCACCCAGTGACCGACTTCTACCCCGAGGATGTCATCGAGGACCTGAGTC  
AGAAGTCCATCACAGGGGAACACAGCCAACTGTTAGACGACGGACATAAGAAAGCTCGAAATGCTTATCT  
CAATAATCCAATTATGAAGAAGGAGATGAATATTTTGATAAAAAATTTGGCACTCTTTGAGGAAGAAATG  
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GTCATTGTGCCATCTTGGCCATCTATGCTGGAGCCATCAAGTCTTCTTTTGGCTCTCCACACTCCCGG  
TCTGCATGCTGGGTAACCGCACCTTTTCAAGACACATTGACGTTTGTCTAAGACCAAGGAAATTA  
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TGCTTAGGCAGCTTAAACCATGAATATGTTCTTGTGACATCACCACTCCTTCAGCTTCTGGTGGGA



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ATCTTCTTCCCTCTGTTACAGGTATCATGGCTGGATCAAACAGATCTGGAGATCTGAAAGATGCTCAGA  
AGTCTATTCCGATTGGTACTATCCTTGCCATCCTGACCACCTCCTTTGTTATTTAAGCAATGTTGTCT  
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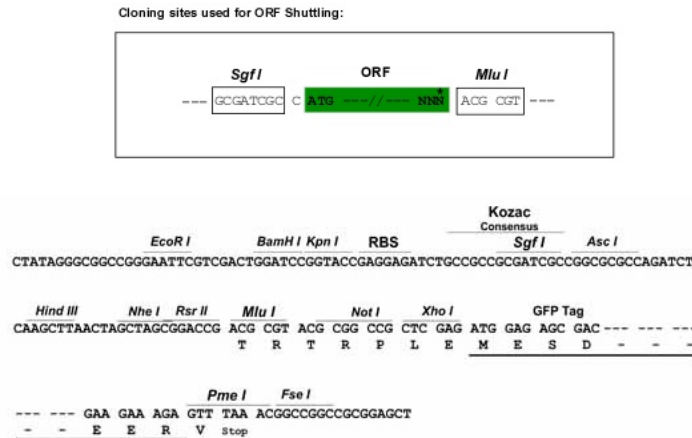
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

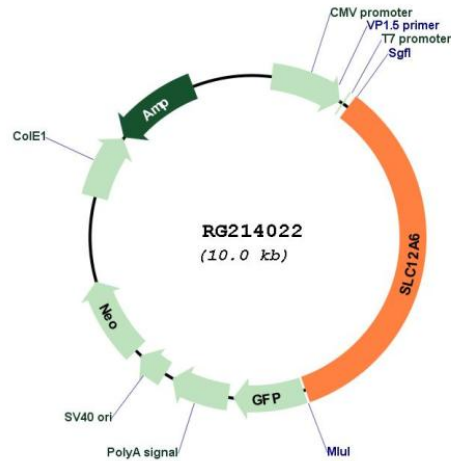
Protein Sequence: >RG214022 representing NM\_133647  
 Red=Cloning site Green=Tags(s)

MHPPETTTKMASVRFMVTPTKIDDIPGLSDTSPDLSSRSSRVRFSSRESVPETSRSSEPMSEMGGATTS  
 ATVALDPPSDRTSHPQDVIEDLSQNSITGEHSQLLDDGHKKARNAYLNNSNYEEGDEYFDKNLALFEEEM  
 DTRPKVSSLLNRMANYTNLTQGAKEHEEAENITEGKKKPTKTPQMGTFMGVYLPCLQNIQIFGVILFLRLTW  
 VVGTAGVLQAFIVLICCCTMLTAISMSAIATNGVVPAGGSYFMISRALGPEFGGAVGLCFYLGTTFAA  
 AMYILGATIEIFLVYIVPRAAIFHSDDALKEAAMLNMRVYGTAFVLMVLVVFVIGVRYVNFASFVFLAC  
 VIYSILAIYAGAIKSSFAPPHFPVCMGNRTLSSRHIDVCSKTKEINNMTVPSKLVGFFCNSSQFFNATC  
 DEYFVHNNVTSIQGIPGLASGIIITENLWSNYLPKGEIEKPSAKSSDVLGSLNHEVYLVDTTTSFTLLVG  
 IFFPSVTGIMAGSNRSGDLKDAQKSIPIGTILAILTTSFVYLSNVVLFACIEGVVLRDKFGDAVKGNLV  
 VGTLSWSPSPWVIVIGSFFSTCGAGLQSLTGAPRLLQAIKDNIIPFLRVFGHASKANGEPTWALLLTA  
 ELGILIASLDLVAPILSMFFLMCYLNVNLACALQTLRLTPNWRPRFRYYHWALSFMGMSICLALMFIS  
 YYAIVAMVIAGMIYKYIEYQGAKEWGDGIRGLSLSAARFALLRLEEGPHTKNWRPQLLVLLKDEDLH  
 VKHPRLLTFASQLKAGKGLTIVGSVIVGNFLENYGEALAAEQTIKHLMEAEKVKGFCQLVVAAKLREGIS  
 HLIQSCGLGGMKHNTVVMGWPNQWQSEDARAWKTFIGTVRVTTAAHLALLVAKNISFFPSNVEQFSEGN  
 IDVWWIVHDGGMMLLPLFLKQHKVWRKCSIRIFTVAQLEDNSIQMKDLATFLYHLRIEAEVEVEMHD  
 SDISAYTYERTLMMEQRSQMLRHMRLSKTERDREAQLVKDRNSMLRLTISGDEDEETETEQEKVHMTWT  
 KDKYMASRGQKAKSMEGFQDLLNMRPDQSNVRRMHTAVKLNEVIVNKSHEAKLVLLNMPGPPRNPEGDEN  
 YMEFLEVLTEGLERVLLVRGGGSEVITIYS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-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

**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]