

Product datasheet for **RG228637**

SLC12A4 (NM_001145963) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC12A4 (NM_001145963) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SLC12A4
Synonyms: CTC-479C5.17; hKCC1; KCC1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG228637 representing NM_001145963
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAGCCGAAGGTGCTGTGTGCGGCTTCGTCTATCTGGAGGGCACTGCCTGGGCGGTCCCTGAGGACA
 CCGAACCTTGGCATCTGCACATTGGGACATGGCAACCACAGAGAGAGCAGCCCTTTTCTTTCCCCCTT
 GGAGGCTCCAGAGGAATTGACTACTATGACAGGAACCTGGCACTGTTTGGGAAGAGCTGGACATCCGC
 CCAAAGGTATCGTCTCTTCTGGAAAGCTCGTCAGCTACACCAACCTCACCCAGGGCGCCAAAGAGCATG
 AGGAGGCCGAGAGTGGGAGGGCACCCGCCGAGGGCAGCCGAGGCACCCAGCATGGGCACCCCTCATGGG
 GGTGTACCTGCCCTGCCTGCAGAATATCTTTGGGGTTATCCTCTTCTGCGGCTGACCTGGATGGTGGGC
 ACAGCAGGTGTGCTACAGGCCCTCCTCATCGTGCTTATCTGCTGCTGTTGTACCCTGCTGACGGCCATCT
 CCATGAGTGCCATCGCCACCAACGGTGTGGTTCAGCTGGGGGCTCCTATTTTCATGATCTCTCGTTCACT
 GGGGCCAGAATTTGGAGGTGCTGTGGGCTGTGCTTCTACCTGGGAACAACATTCGCAGCAGCCATGTAC
 ATCCTGGGGGCCATCGAGATCTTGTGACCTACATTGCCCCACCAGCTGCCATTTTTTACCATCGGGTG
 CTCATGACACGTGAATGCCACTTTGAACAATATGCGTGTGTATGGGACCATTTTCTGACCTTCATGAC
 CCTGGTGGTGTGTGGGGGTCAAGTATGTGAACAAATTTGCCTCGCTCTTCTGGCCTGTGTGATCATC
 TCCATCCTCCATCTATGCTGGGGGCATAAAGTCTATATTTGACCCCTCCCGTGTTCGGTATGCATGC
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GGCACACTGGCCTGGCCTTCACCCTGGGTCACTCGTCATCGGCTCCTTCTTTTCAACGTGTGGCGCTGGCC
 TCCAGAGCCTCACAGGGGACCACGCCTATTGCAGGCCATTGCCAAGGACAAATCATCCCTTCTCCG
 GGTGTTTGGCCACGGGAAGGTGAATGGTGAACCCACATGGGCACTCCTCTGACGGCACTCATCGCCGAG
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 GGAAATTGAGAAGGTGAAGGGCTTCTGCCAGTGGTGGTGGCCAGCAAGGTGCGGAGGGGCTGGCCAC
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 TCTGGAGGAAGTGCCGGATGCGCATCTTACAGTGGCCAGATGGATGACAACAGCATCCAGATGAAGAA
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 GACTGACCAAGACTGAGCGGGAGCGAGAAGCCAGCTGGTCAAGGATCGGCACTCGGCCCTGCGGCTGGA
 GAGCCTGTACTCGGACGAGGAAGATGAGTCTGCAGTGGGGGTGACAAGATCCAGATGACGTGGACCAGG
 GACAAGTACATGACTGAGACCTGGGACCCAGCCATGCCCTGACAATTTCCGGGAGCTGGTGCACATTA
 AGCCGGACCAATCCAATGTGCGGCGCATGCACACTGCTGTGAAGCTCAATGAAGTATTGCACGCGCTC
 CCACGACGCCCGCTGGTCTCCTAAACATGCCTGGCCACCCAGGAACAGTGAAGGCGAGGAGAGATA
 ATGGAGTTCCTCGAGGTGCTGACCGAGGCCTTGAGCGGGTGTGTTGGTGCAGGCTGGTGGCCGTGAAG
 TCATACCATCTACTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG228637 representing NM_001145963
 Red=Cloning site Green=Tags(s)

MAEAVCGFVYLEGTAWAVPEDTEPLASCTLGHGNHRESSPFLSPLEASRGIDYDRNLALFEEELDIR
 PKVSSLLGKLVSYTNLTQGAKEHEEAESGEGTRRRRAAEAPSMGTLMGVYLPCLQIFGVILFRLTWMVG
 TAGVLQALLIVLICCCCTLLTAISMSAIATNGVVPAGGSYFMISRSLGPEFGGAVGLCFYLGTTFAAAMY
 ILGAIEILLTYIAPPAAIFYPGSAHDTSNATLNNMRVYGTIFLTFMTLVVFGVKVYVNFASLFLACVII
 SILSIYAGGIKSI FDPVPVCM LGNR TLRDQFDICAKTAVVDNETVATQLWSFFCHSPNLTTDSCDPY
 FMLNNVTEIPGIPGAAAGVLQENLWSAYLEKGDIVEKHGLPSADAPSLKESLPLVYVADIATSFTVLVGI
 FFPSVTGIMAGSNRSGDLRDAQKSIPVGTILAIITTSVYFSSVVLFGACIEGVVLRDKYGDGVSRLV
 GTLAWPSPWVIVIGSFFSTCGAGLQSLTGAPRLLQAIKDNIIPFLRVFHHGKVNGETWALLLTALIAE
 LGILIASLDMVAPILSMFFLMCYLFVNLAQAVQTLRTPNWRPRFKYYHWALSFLGMSLCLALMFVSSWY
 YALVAML IAGMIYKYIEYQGAKEWGDGIRGLSLSAARYALLRLEEGPPHTKNWRPQLLVLLKLEDLHV
 KYPRLTFASQLKAGKGLTIVGSIQGSFLESYGEAQAEEQTIKNMMEIEKVKGFCQVVVASKVREGLAH
 LIQSCGLGMRHNSVVLGWPYGWRQSEDPRAWKTFIDTVRCTTAAHLALLVPKNIAFYPSNHERYLEGHI
 DVWVIVHDGGMLMLLPFLLRQHVKVWRKCRMRIFTVAQMDDNSIQMKKDLAVFLYHLRLEAEVEVEMHNS
 DISAYTYERTLMMEQRSQMLRQMLTKTEREREALVKDRHSALRLESLYSDEEDESAVGADKIQTWTR
 DKYMETEWDPSHAPDNFRELVHIKPDQSNVRRMHTAVKLENEVIVTRSHDARLVLLNMPGPPRNSEGDENY
 MEFLEVLTEGLERVLLVRGGREVIITYS

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001145963

ORF Size: 3237 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_001145963.2](#)

RefSeq Size: 4652 bp

RefSeq ORF: 3240 bp

Locus ID: 6560

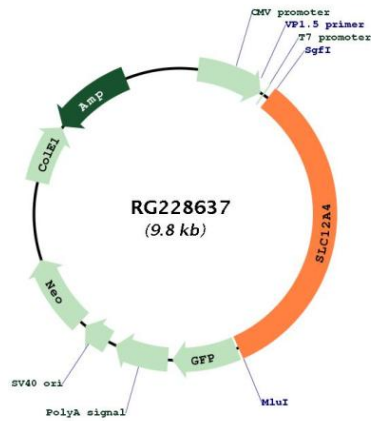
UniProt ID: [Q9UP95](#)

Cytogenetics: 16q22.1

Protein Families: Transmembrane

Gene Summary: 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]

Product images:



Circular map for RG228637