

Product datasheet for **RG228634**

SLC12A4 (NM_001145964) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC12A4 (NM_001145964) 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: >RG228634 representing NM_001145964
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGGACACCCTGAGCCCCGACATGGCAACCACAGAGAGAGCAGCCCTTTCTTTCCCCCTGGAGG
CTTCCAGAGGAATTGACTACTATGACAGGAACCTGGCACTGTTTGAGGAAGAGCTGGACATCCGCCCAA
GGTATCGTCTCTTCTGGAAAGCTCGTCAGCTACACCAACCTCACCCAGGGCGCCAAAGAGCATGAGGAG
GCCGAGAGTGGGAGGGCACCCGCCGAGGGCAGCCGAGGCACCCAGCATGGGCACCCTCATGGGGTGT
ACCTGCCCTGCCTGCAGAATATCTTTGGGGTTATCCTCTTCTGCGGCTGACCTGGATGGTGGGCACAGC
AGGTGTGCTACAGGCCCTCCTCATCGTGTATCTGCTGCTGTTGTACCTGCTGACGGCCATCTCCATG
AGTGCCATCGCCACCAACGGTGTGGTTCAGCTGGGGGCTCCTATTTTCATGATCTCTCGTCACTGGGGC
CAGAAATTTGGAGGTGCTGTGGGCTGTGCTTCTACCTGGGAACAACATTCGCAGCAGCCATGTACATCCT
GGGGGCCATCGAGATCTTGTGACCTACATTGCCCCACCAGCTGCCATTTTTTACCCATCGGGTGTCTAT
GACACGTGAATGCCACTTTGAACAATATGCGTGTGTATGGGACCATTTTCTGACCTTCATGACCTGG
TGGTGTGTGGGGTCAAGTATGTGAACAAATTTGCCTCGCTCTTCTGGCCTGTGTGATCATCTCCAT
CCTCTCCATCTATGCTGGGGCATAAAGTCTATATTTGACCCTCCCGTGTTCGGTATGCATGCTGGGC
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GCTCAACAATGTGACCGAGATCCCTGGCATCCCGGGGACAGCTGTGGTGTGCTCCAGGAAAACCTGTGG
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AGGAGAGCCTGCCTCTGTACGTGGTGTGACATCGCCACATCCTTACCCTGCTGGTGGCATCTTCTT
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AGCCTCACAGGGGACCACGCCTATTGCAGGCCATTGCCAAGGACAACATCATCCCCTTCTCCGGGTGT
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 AGCGAGGACCCCGTGCCTGGAAGACCTTATTGACACCGTGCCTGCACTACGGCTGCCACCTGGCC
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 TGTACTIONGAGGAGAAGATGAGTCTGCACTGGGGCTGACAAGATCCAGATGACGTGGACCAGGGACAA
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 ACGCCGCTGGTCTCCTAAACATGCCTGGCCACCCAGAACAGTGAAGGCGACGAGAAGTACATGGA
 GTTCTCGAGGTGCTGACCGAGGCCTTGAGCGGGTGTGTTGGTGGCGGCTGGTGGCCGTGAAGTCATC
 ACCATCTACTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG228634 representing NM_001145964

Red=Cloning site Green=Tags(s)

MGDTLSPGHGNHRESSPFLSPLEASRGIDYDRNLALFEEELDIRPKVSSLLGKLVSYTNLTQGAKEHEE
 AESGEGTRRRAAEAPSMGTLMGVYLPCLQNIQIFGVILFLRLTWMVGTAGVLQALLIVLICCCCTLLTAISM
 SAIAITNGVVPAGGSYFMISRSLGPEFGGAVGLCFYLGTTFAAAMYILGAIEILLTYIAPPAIFYPGSAH
 DTSNATLNNMRVYGTIFLTFMFLVVFVGVKYNKFAFLACVILSILSIYAGGIKSIDPFPVPCMLG
 NRTLNRDQFDICAKTAVVDNETVATQLWSFFCHSPNLTTDSCDPYFMLNNVTEIPGIPGAAAGVLQENLW
 SAYLEKGDIVEKHGLPSADAPSLKESLPLYVADIATSFTVLVGIFFPSVTGIMAGSNRSGDLRDAQKSI
 PVGTILAIITTSLVYFSSVVLFGACIEGVVLRDKYDGVSRNLVVGTLAWPSPWVIVIGSFFSTCGAGLQ
 SLTGAPRLLQAIKDNIIIPFLRVFGHGKVNGETWALLLTALIAELGILIASLDMVAPILSMFFLMCYLF
 VNLACAVQTLRLTPNWRPRFKYHVALSFLGMSLCLALMFVSSWYVALVAMLIAGMIYKIEYQGAKEW
 GDGIRGLSLSAARYALLRLEEGPPTHKNWRPQLLVLLKLEDLHVYPRLLTFASQLKAGKGLTIVGSVI
 QGSFLESYGEAAEQTIKNMMEIEKVKGFQVAVVASKVREGLAHLIQSCGLGMRHNSVVLGWYPGWRQ
 SEDPRAWKTFIDTVRCTTAAHLALLVPKNIAFYPSNHERYLEGHIDVWVIVHDGGMMLLPFLLRQHKVW
 RKCRMRIFTVAQMDDNSIQMKDLAVFLYHLRLEAEVEVEMHNSDISAYTYERTLMMEQRSQMLRQML
 TKTEREREALVKDRHSALRLESLSYDEEDESAVGADKIQMTWTRDKYMETWDPSPHAPDNFRELVHIKP
 DQSNVRRMHTAVKLENIIVTRSHDARLVLLNMPGPPRNSEGDENYMEFLEVLTEGLERVLLVRGGGREVI
 TIYS

TRTRPLE – GFP Tag – V

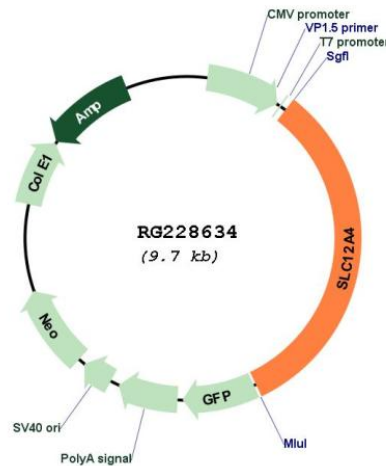
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001145964

ORF Size: 3162 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.

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| 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: | <ol style="list-style-type: none">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: | <u>NM_001145964.2</u> |
| RefSeq Size: | 4643 bp |
| RefSeq ORF: | 3165 bp |
| Locus ID: | 6560 |
| UniProt ID: | <u>Q9UP95</u> |
| 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] |