

Product datasheet for **RG200338**

SLC12A4 (NM_005072) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC12A4 (NM_005072) 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:	>RG200338 representing NM_005072 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGCCTCACTTCACCGTGGTCCAGTGGACGGGCCGAGGCGGGCGACTATGACAACCTCGAGGGGCTCA
GTTGGGTGGACTACGGGGAGCGCCGAGCTGGATGACTCGGACGGACATGGCAACCACAGAGAGAGCAG
CCCTTTCTTTCCCCCTTGGAGGCTTCCAGAGGAATTGACTACTATGACAGGAACCTGGCACTGTTGAG
GAAGAGCTGGACATCCGCCAAAGGTATCGTCTTCTGGGAAAGCTCGTCAGCTACACCAACCTCACCC
AGGGCGCCAAAGAGCATGAGGAGGCCGAGAGTGGGGAGGGCACCCGCGAGGGCAGCCGAGGCACCCAG
CATGGGCACCCTCATGGGGGTGTACCTGCCTGCCTGCAGAATATCTTTGGGGTTATCCTTCTCCTGCGG
CTGACCTGGATGGTGGGCACAGCAGGTGTGCTACAGGCCCTCCTCATCGTGCTTATCTGCTGCTGTTGTA
CCCTGCTGACGGCCATCTCCATGAGTGCCATCGCCACCAACGGTGTGGTCCAGCTGGGGCTCCTATTT
CATGATCTCTCGTTCACCTGGGGCCAGAATTTGGAGGTGCTGTGGGCTGTGCTTCTACCTGGGAACAACA
TTCGCAGCAGCCATGTACATCCTGGGGCCATCGAGATCTTGCTGACCTACATTGCCCCACCAGCTGCCA
TTTTTTACCCATCGGGTGTGCTATGACACGTGCAATGCCACTTTGAACAATATGCGTGTGTATGGACCAT
TTTCTGACCTTCATGACCCTGGTGGTGTGTTGTGGGGTCAAGTATGTGAACAAATTTGCCTCGCTCTTC
CTGGCCTGTGATCATCTCCATCTCCATCTATGCTGGGGGCATAAAGTCTATATTTGACCCCTCCCG
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TGTAGTGACAATGAGACAGTGGCCACCAGCTATGGAGTTTCTTCTGCCACAGCCCAACCTTACGACC
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CAGCAGTGTGTTCTCTTTGGTGCCTGCATTGAGGGTGTGGTTCTCCGGACAAGTATGGCGATGGTGTGTC



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AGCAGGAAGCTTGGTGGTGGGCACACTGGCCTGGCCTTACCCTGGGTCATCGTCATCGGCTCCTTCTTTT
 CAACGTGTGGCGCTGGCCTCCAGAGCCTCACAGGGGACCACGCCTATTGCAGGCCATTGCCAAGGACAA
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 AGTCAATTGTACGCGCTCCACGACGCCCCTGGTTCTCCTAAACATGCCTGGCCACCCAGGAACAGT
 GAGGGCGACGAGAACTACATGGAGTTCTCGAGGTGCTGACCGAGGGCCTTGAGCGGGTGTGTTGGTGC
 GCGGTGGTGGCCGTAAGTCATCACCATCTACTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG200338 representing NM_005072
 Red=Cloning site Green=Tags(s)

MPHFTVVPVDGPRRGDYDNLLEGLSWVDYGERAELDDSDGHGNHRESSPFLSPLEASRGIDYYDRNLALFE
 EELDIRPKVSSLLGKLVSYTNLTQAKEHEEAESGEGTRRRRAEAPSMGTLMGVYLPCLQNIQIFGVILFLR
 L TWMVGTAGVLQALLIVLICCCCTLLTAISMSAIATNGVVPAGGSYFMISRSLGPEFFGGAVGLCFYLGTT
 FAAAMYILGAIEILLTYIAPPAIFYPGSAHDTSNATLNNMRVYGTIFLTFMTLVVFGVKYVNFASF
 LACVIIISILSIYAGGIKIFDPPVFPVCM LGNRTL SRDQFDICAKTAVVDNETVATQLWSFFCHSPNLTT
 DSCDPYFMLNNVTEIPGIPGAAAGVLQENLWSAYLEKGDIVEKHGLPSADAPSLKESLPLVYVADIATSF
 TVLVGIFFPVSVTGIMAGSNRSGDLRDAQSIPVGTILAIITTSLVYFSSVVLFGACIEGVLRDKYGDGV
 SRNLVVGTLAWPSPWVIVIGSFFSTCGAGLQSLTGAPRLLQAI AKDNIIPFLRVFGHGKVNGEPTWALLL
 TALIAELGILIASLDMVAPILSMFFLMCYL FVNLACAVQTLRLTPNWRPRFKYYHWALSFLGMSLCLALM
 FVSSWYYALVAML IAGMIYKYIEYQGAKEWGDGIRGLSL SAARYALLRLEEGPHTKNWRPQLLVLLKL
 DEDLHVKYPRLLTFASQLKAGKGLTIVGSVIQGSFLESYGEAQAAEQTIKNMMEIEKVKGFCQVVVASKV
 REGLAHLIQSCGLGMRHNSVVLGWPYGWRQSEDPRAWKTFIDTVRCTTAAHLALLVPKNIAFYPSNHER
 YLEGHIDVWVIVHDGGM LMLLPFLLRQHKVWRKCRMRIFTVAQMDDNSIQMKDLAVFLYHLRLEAEVEV
 VEMHNSDISAYTYERTLMMEQRSQMLRQMLTKTEREQAQLVKDRHSALRLESLSYDDEDESAVGADKI
 QMTWTRDKYMTETWDP SHAPDNFREL VHIKPDQSNVRRMHTAVKLNEVIVTRSHDARLVLLNMPGP
 PRNS EGDENYMEFLEVLTEGLERVLLVRGGREVIITIS

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_005072

ORF Size: 3255 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_005072.3](#), [NP_005063.1](#)

RefSeq Size: 3884 bp

RefSeq ORF: 3258 bp

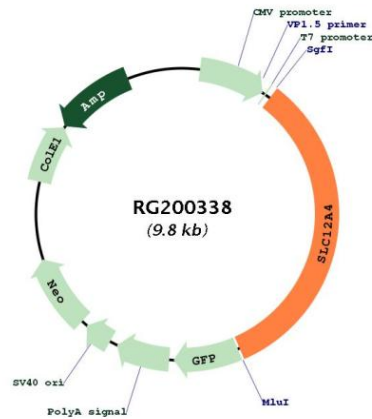
Locus ID: 6560

UniProt ID: [Q9UP95](#)

Cytogenetics: 16q22.1
Domains: KCl_Cotrans_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 RG200338