

Product datasheet for RC230648

SLC12A1 (NM_001184832) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC12A1 (NM_001184832) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SLC12A1
Synonyms: BSC1; NKCC2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC230648 representing NM_001184832
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCACTGAACAACCTTCCAATGATTTCTGGATTCACTGCCCAGTAATACCAATCGCTTCAAGTTA
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 AACCTCTTTGGGGATGAAGCTCAGAAAAGACTCAGAATCAGCTTTAGGCCTGGGATCAGGAGTGCTAT
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Protein Sequence:

>RC230648 representing NM_001184832
 Red=Cloning site Green=Tags(s)

MSLNSSNVFLDSVPSNTNRFQVSVINENHESSAAADDNTDPPHYEETSFGDEAQKRLRISFRPGNQECY
 DNFLQSGETAKTDASFHAYDSHTNTYYLQTFGHNTMDAVPKIEYYRNTGSI SGPKVNRPSLLEIHEQLAK
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 LGVIIIGLSVVVTTLTGISMSAICTNGVVRGGGAYYLISRSLGPEFGGSI GLIFAFANAVAVAMYVVGFA
 ETVVDDLKESDSMMVDPNDIRIIGSITVVILLGISVAGMEWEAKAQVILLVILLIAIANFFIGTVIPSN
 NEKKS RGF FNYQASIFAENFGPRFTKGEFFSVFAIFFPAATGILAGANISGDLEDPQDAIPRGTMLAIF
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 GFGPLITAGIF SATLSSALASLVSAPKVFQALCKDNIYKALQFFAKGYGKNNEPLRGYIL TFLIAMAFIL
 IAELNTI APIISNFFLASYALINFSCFHASYAKSPGWRPAYGIYMNWVSLFGAVLCCA VMFVINWAAVI
 TYVIEFFLYVYVTCCKPDVNWGSSTQALSYVSALDNALELTTVEDHVKNFRPQCIVLTGGPMTRPALLDI
 THAFTKNSGLCICCEVFVGRPKLCVKEMNSGMAKKQAWLIK NKIKAFYA AAVADC FRDGVRSLLQASGLG
 RMKPNTLVIGYKKNWRKAPL TEIENYVGI IHDAFDFEIGVVIVRISQGFDISQVLQVQEELERLEQERLA
 LEATIKDNECEEESSGIRGLFKKAGKLNITKTTPKKDG SINTSQSMHVGEFQKLVEASTQFKKQEKGT
 IDVWWLFDGGGLTLLIPYILTLRKKWKDCKLRIYVGGKINRIE EKI VMASLLSKFRIFADIIHIGDIN
 IRPNKESWKVFEEMIEPYRLHESCKDLTTAEKLR ETPWKITDAELEAVKEKSYRQVRLNELLQEHSRAA
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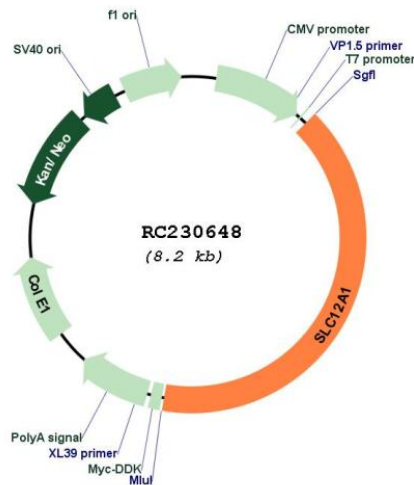
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001184832

ORF Size: 3297 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:	<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_001184832.2</u>
RefSeq ORF:	3300 bp
Locus ID:	6557
UniProt ID:	<u>Q13621</u>
Cytogenetics:	15q21.1
Protein Families:	Druggable Genome, Transmembrane
MW:	121.8 kDa
Gene Summary:	<p>This gene encodes a kidney-specific sodium-potassium-chloride cotransporter that is expressed on the luminal membrane of renal epithelial cells of the thick ascending limb of Henle's loop and the macula densa. It plays a key role in concentrating urine and accounts for most of the NaCl resorption. It is sensitive to such diuretics as furosemide and bumetanide. Some Bartter-like syndromes result from defects in this gene. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their biological validity in humans has not been experimentally proven. [provided by RefSeq, May 2010]</p>