

Product datasheet for **SC329286**

SLC12A1 (NM_001184832) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC12A1 (NM_001184832) Human Untagged Clone
Tag:	Tag Free
Symbol:	SLC12A1
Synonyms:	BSC1; NKCC2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001184832, the custom clone sequence may differ by one or more nucleotides

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ATGTCACTGAACAACCTCTCCAATGATTTCTGGATTCAGTGCCAGTAATACCAATCGC
TTTCAAGTTAGTGTCAATAATGAGAACCATGAGAGCAGTGCAGCTGCAGATGACAATACT
GACCCACCACATTATGAAGAAACCTCTTTGGGGATGAAGCTCAGAAAAGACTCAGAATC
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AAAACAGATGCCAGTTTTACGCTTATGATTCTCACACAAACACATACTATCTACAACT
TTTGGCCACAACCCATGGATGCCGTTCCCAAGATAGAGTACTATCGTAACACCGGCAGC
ATCAGTGGGCCAAGGTCAACCGACCCAGCCTGCTTGAGATTCAGGCAACTCGCAAAG
AATGTGGCAGTACCCCAAGTTCAGCTGACAGAGTTGCTAACGGTGATGGGATACCTGGA
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AAAGGTGTGCTGGTAAGATGCATGCTGAACATCTGGGGAGTCATGCTTTCATTGCGCTC
TCCTGGATTGTTGGAGAAGCTGGAATTGGTCTTGAGTCAATCATCATTGGCCTAAGTGTG
GTAGTAACGACACTCACAGGTATTTCTATGTCTGCTATTTGCACGAATGGAGTAGTAAGA
GGAGGTGGGGCCTACTATCTTATTTCCAGAAGTTAGGGCCCAGTTCGGTGGGTCAATA
GGCCTGATCTTTGCTTTTGCTAATGCAGTGGCTGTTGCTATGTATGTGGTGGGATTTGCT
GAGACTGTAGTAGATCTTCTTAAGGAGAGTGATTTCGATGATGGTGGATCCAACCAATGAC
ATCCGGATTATAGGCTCCATCACAGTGGTATTCTTCTAGGAATTCAGTAGCTGGAATG
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TCAGGAGATTTGGAGGATCCCAAGATGCCATCCCAAGGAAACCATGCTGGCCATTTTC
ATCACCCTGTTGCTACTTAGGGTTGCAATTTGTGTAGGGCTGTGTGGTCCGAGAT
GCCACCGGAACATGAATGACACCATCATTTCTGGGATGAACTGCAATGGTTCAGCAGCA
TGTGGGTTGGCTATGACTTCTCAAGATGTCGACATGAACCATGTCAGTACGGGCTGATG
AACAAATTCAGGTCATGAGCATGGTATCAGGGTTCGGCCCCCTCATCACTGCGGGAATC

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TTTTCTGCAACACTCTCCTCCGCCCTGGCCTCCCTTGTGACGCGCACCCAAAGTGTCCAG
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 AACAAATGAACCCCTGAGAGGATATATTCTCACTTTTCTTAGCCATGGCATTATTCTT
 ATTGCGGAACTGAACACCATTGCTCCCATCATCTCCAACTTTTCTGGCCTCATATGCA
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 TTTGTCATCAACTGGTGGGCAGCTGTCAACCTATGTCATTGAATTCTTCCTTTACGTC
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 GTGAGTGTCTTAGACAATGCTCTGGAATTAACACAGTGGAAGACCACGTAATAAACTTC
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 CGCAAACGTGTGTTAAGGAGATGAACAGTGGCATGGCGAAAAAACAGGCCTGGCTTATA
 AAGAACAAAATCAAGGCTTTTTATGCTGCAGTGGCGGCAGACTGTTTCAGGGATGGTGC
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 CATGAAAGCTGCAAAGATTTAACAACCTGCTGAGAAATTAAGAAAGAAACTCCGTGGAAA
 ATTACAGATGCAGAACTGGAAGCAGTCAAGGAAAAGAGTTACCGCCAAGTTGACTGAAT
 GAACTCTTACAGGAGCACTCCAGAGCTGCTAATCTCATTGTCCTGAGCCTTCCCGTGGCA
 AGAAAGGGATCCATATCGGATTTGTTGTATATGGCTTGGTTGAAATCCTCACAAAGAAC
 CTCCCACCTGTCTTACTAGTTAGAGGAAATCACAAAAATGTCTTGACATTTTACTCTTAA

- Restriction Sites:** Please inquire
- ACCN:** NM_001184832
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_001184832.1](#), [NP_001171761.1](#)

RefSeq Size: 4717 bp

RefSeq ORF: 3300 bp

Locus ID: 6557

UniProt ID: [Q13621](#)

Cytogenetics: 15q21.1

Protein Families: Druggable Genome, Transmembrane

Gene Summary: 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]

Transcript Variant: This variant (2) uses an alternate in-frame exon in the 5' coding region, compared to variant 1, and encodes isoform F. Isoforms A and F are the same length but differ in the region of amino acids 214-238. **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.