

## Product datasheet for **SC101231**

### SLC9A1 (NM\_003047) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SLC9A1 (NM\_003047) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** SLC9A1  
**Synonyms:** APNH; LIKNS; NHE-1; NHE1; PPP1R143  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL6  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_003047 edited  
GGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGACACTAT  
AGAATACAAGCTACTTGTCTTTTTGCAGCGGCCGGAATTCGGCACGAGGGCTCGCTGG  
TGCTATAAAGTGACAGCGCCGGGCTCAGCTAGGCTTCAGTCTGCTGCCGCCGGGGCCGGG  
GCTAGGGTTAGTTCTGGAGCTGGACCAGGAGGAGCTGCAGCTGGGCCGGGGCGGAGCGCC  
GCGCCGCGCCAGGGCCGCGAGGAGGGGCGTGTGCTGCTGGCCACCGCGAGCCGCCCC  
AGCCCGCGCCGAGGCGCTTCCCGCCAGGCCGCCTGCCTTCCGCCTTTTCCATTTCCC  
GGAATCTCAGCCCGCGCGCCTGGACCCCTGCCCTCTCTGGGTGGAGAAGCTCCCGGCC  
GCTTCCCGGTTTCACTCCTTCTCAGCCTGGGCTCCAGCCCCCTCTCTCTTTTCTGGA  
CTGGCTCTACCCCTTTCGGTCCCCTTCTTTAGCTCAGGCTCCCTACCCCTTCTTTAG  
CCCACAGCCAGAGTCCCAGCTCCTCAGTCACTTCTCAGCCAAGGTCCCAGCCTTCC  
TTCTTCTTTCTTTGACTATCCCTATCCTGCCCTTCTCTATCCCTAGGGCTCAGTT  
TCCCACATCCGTCTCCCTTCCAGGCCGGAGTCCAGACCTTTTGGTCTCCTTTTCG  
TGGTCTTCTGGGCTCTTGGCCCTTTCCCACTTTGGAGTTCAGATTGCAAACCCAG  
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CCTAGAGACTACGCCAGTCTCTTCCCACTTGTGACCTTTGTACCTATGTGCCCCG  
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CCGGAGGTCACCCAGAGAGCCGCCCTGTTAATCATTCCGTCACTGATCATGGCATGAAG  
CCGCGCAAGGCCCTTTCCAGTCTGGCATCGACTACACACAGTGGCACCCTTCCGAG  
ATCTCCCTCTGGATCCTTCTGGCCTGCCTCATGAAGATAGGTTTCCATGTGATCCCACT  
ATCTCAAGCATCGTCCCGGAGAGCTGCCTGCTGATCGTGGTGGGGCTGCTGGTGGGGGC  
CTGATCAAGGGTGTAGGCGAGACACCCCTTCTGTCAGTCCGACGTCTTCTTCTCTTC  
CTGCTGCCGCCATCATCTGGATGCGGGCTACTTCTGCCACTGCGGCAGTTCACAGAA  
AACCTGGGCACCATCCTGATCTTGGCGTGGTGGGCACGCTGTGGAACGCCTTCTCTCTG



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GGCGCCCTCATGTACGCCGTGTGCCTGGTGGGCGGTGAGCAGATCAACAACATCGGCCTC
CTGGACAACCTGCTCTTCGGCAGCATCATCTCGGCCGTGGACCCCGTGGCGGTTCTGGCT
GTCTTTGAGGAAATTCACATCAATGAGCTGCTGCACATCCTTGTTTTGGGGAGTCCTTG
CTCAATGACGCCGTCACCTGTGGTCTGTATCACCTCTTTGAGGAGTTTGCCAACTACGAA
CACGTGGGCATCGTGGACATCTTCTCGGCTTCTGAGCTTCTTCGTGGTGGCCCTGGGC
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CACATCCGGGTATCGAGCCGCTCTTCGCTTCTCTACAGCTACATGGCCTACTTGTC
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GTCCCCTCACAGACTCTTCCACCAGAGCA
```

**5' Read Nucleotide Sequence:**

```
>OriGene 5' read for NM_003047 unedited
CTTATACCGCCGTTGNCGCATATGGGCGTAGGCGGTACGGTGGGAAGGTCTATATAAG
CAGAGCTCATTTAGGTGACACTATAGAATAACAAGCTACTTGTCTTTTTGCAGCGGCCG
GAATTCGGCACGAGGGCTCGCTGGTGCCTATAAGTGACAGCGCCGGGCTCAGCTAGGCTT
CAGTCTGCTGCCCGGGGCGGGGCTAGGGTTAGTTCTGGAGCTGGACCAGGAGGAGCT
GCAGCTGGGCGGGCGGAGCGCCGCGCCAGGGCCGCGAGGAGGGGCGTGTGCT
GCTGGCCACCGGAGCCGCCCCAGCCCGCGCCAGGGCGCTTCCCGCCAGGCCGCTG
CCTTCCGCTCTTTCATTTCCCGGAATCTCAGCCCGCGCGCCTGGACCCCTGCCCT
CTCTGGGTGGAGAAGCTCCCGCCGCTTCCCGTTTCACTCCTTCTCAGCCTGGGCTCC
AGCCCCCTCTCTCTTTCTGGACTGGCTCTCACCCCTTCCGGTCCCCTTCTTAGCT
CAAGCTCCCTACCCCTCCTTTAGCCCACAGCCAGAGTCCCAGTCTCTCAGTCACTTTC
CTCAGCCAAAGGTCCCAGCCTCCTTCTTCTTTTCTTCTGACTATCCCTATCCTGCC
TTCTCTATCCCTAGGGCTCAGTTTCCACATCCGTCCTCCCTTCCCAGGCCGGGAGT
TCCAGACTTTTTAGTCTCTTTCGTGGTTCCTGAGTCTTAGCCCTTTTCCACTT
TGGAGTTCAGATTGCANACCCAGCCCTCCTCCACCCCAAGATAATTTGCTCCATGGAAA
TGCTTCTCTAAAACATGAAACTTNTCTAGAGACTACGCCAGTCTCTNCCCACTTGCTG
ACCTTTGCTAC
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_003047 unedited GGTTTATCTATGNNACCGCGGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTAA AACTCACATTGATTTATTAGAATATGAAAAAGATCAGTTTCTTCTGTACAGGCAGCAGAG TGGCAGCAGCTGCGGTGGCTTGGTACGTGGTTGTCGATGTCACCCTTGCATGGTGACTCC TGCCAAAACAGCACTTGCATGGAGAGGAGGATGGACAGATGGGCCGAGGACCCATGGCCC AGTCCCCTGCAAAAAGGGACACTCTGACTATTGCACAATCCTGGGGGAGTGCCCCAGGGA CAAGGGGAAGGAGTGTGTGGGCAAAGTCTCTGGGGGCCAGGATTCTGCCCAATCCA CCAGCCCCAGGGGACAGGGGATCCTCAGGGGAGGCCTTCTCCCCCACCGCCTCCACAA TGGGCTCCACAGCAGGCAGGGTGTGGTACACACAAGGAAAGGTTCCAGGGGCCAAACCC AGGGTGGGGGAAGTAAGAGCAAGCCAGCANGACTGGAGGTCAAGCCCAAGAGCTAAGCAG GTGCCAAGAGGCCCGCATCTGTGAAGCTGGAGAGACTCTTGATTAGGAGTGGGAGTTACA TCTGATGCACAATCTTCGAGCCACAGTTAAAAACCCACCAGCCGAAAAACCTGGGGGA AGGGTTGGACAAACAGGCCCAAATTAAGGAGGGTAATTTGGAGTGTGAGGAGGGGGTTA TAGGCCAACCATTTGCCCCGGGTTTTTAAAATGTTTTAAAAAAAAGGACGCCCTT GTGCAACATCTTTTTGGGGGGAACACAACAATTTAAAAGGGCCCCATTTTGGAGCC CCGGGCAATCTTTTCCCCAAAACCTTCCCTAGGGGCCAATGTCCCTGGGGAACAC ACATTTAAAAACTCTTT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_003047
<b>Insert Size:</b>	4700 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_003047.2</a> , <a href="#">NP_003038.2</a>
<b>RefSeq Size:</b>	4516 bp
<b>RefSeq ORF:</b>	2448 bp
<b>Locus ID:</b>	6548
<b>UniProt ID:</b>	<a href="#">P19634</a>
<b>Cytogenetics:</b>	1p36.11
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Cardiac muscle contraction, Regulation of actin cytoskeleton

**Gene Summary:**

This gene encodes a Na<sup>+</sup>/H<sup>+</sup> antiporter that is a member of the solute carrier family 9. The encoded protein is a plasma membrane transporter that is expressed in the kidney and intestine. This protein plays a central role in regulating pH homeostasis, cell migration and cell volume. This protein may also be involved in tumor growth. [provided by RefSeq, Sep 2011]

Transcript Variant: This variant (1) represents the longest transcript and encodes the functional protein. 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.