

Product datasheet for **SC324038**

epithelial Sodium Channel alpha (SCNN1A) (NM_001038) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: epithelial Sodium Channel alpha (SCNN1A) (NM_001038) Human Untagged Clone
Tag: Tag Free
Symbol: epithelial Sodium Channel alpha
Synonyms: BESC2; ENaCa; ENaCalpha; LIDL3; SCNEA; SCNN1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001038.4
AGGGGAACAAGCTGGAGGAGCAGGACCCTAGACCTCTGCAGCCCATACCAGGTCTCATGG
AGGGGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACTCCAGGGCTCATGA
AGGGGAACAAGCGTGAGGAGCAGGGGCTGGGCCCGAACCTGCGGCGCCCGAGCAGCCCA
CGGCGGAGGAGGAGGCCCTGATCGAGTTCCACCGCTCCTACCGAGAGCTCTTCGAGTTCT
TCTGCAACAACACCACCATCCACGGCGCCATCCGCCTGGTGTGCTCCCAGCACAACCGCA
TGAAGACGGCCTTCTGGGAGTGTGTGGCTCTGCACCTTTGGCATGATGTACTGGCAAT
TCGGCCTGCTTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAACATCAACCTCAACT
CGGACAAGCTCGTCTTCCCGCAGTGACCATCTGCACCCTCAATCCCTACAGGTACCCGG
AAATTAAGAGGAGCTGGAGGAGCTGGACCGCATCACAGAGCAGACGCTCTTTGACCTGT
ACAAATACAGCTCCTTACCACCTCTCGTGGCCGGCTCCCGCAGCCGTGCGGACCTGCGGG
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GAGCCCGTAGCGTGGCCTCCAGCTTGCAGGACAACAACCCCAAGGTGGACTGGAAGGACT
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GCCGCTTCAACCAGGTCTCCTGCAACCAGGCGAATTACTCTCACTTCCACCACCCGATGT
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TGGAGTACTGTGACTACAGAAAGCACAGTTCTGGGGTACTGCTACTATAAGCTCCAGG
TTGACTTCTCCTCAGACCACCTGGGCTGTTTACCAAGTCCCGGAAGCCATGCAGCGTGA
CCAGCTACCAGCTCTCTGCTGGTACTCAGGATGCCCTCGGTGACATCCAGGAATGGG



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TCTTCCAGATGCTATCGCGACAGAACAATTACACCGTCAACAACAAGAGAAATGGAGTGG
CCAAAGTCAACATCTTCTTCAAGGAGCTGAACTACAAAACCAATTCTGAGTCTCCCTCTG
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TGCTCTGTCTTGTCCCAGCCAGGCCCTGCTCCCTCTCCAGCCTTGACAGCCCCCTCCC
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GCTCCTCTGGTGGGAGGGTGTGGCCCTGGCAAGATTGAAGGATGTGCAGGGCTTCTCT
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CCATTACTTTTGTGAACGCTTCTGCCACATCTTGTCTTCCCAAAATTGATCACTCCGCC
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TTTCTTGTACATTGTGTCTCCCTTCCCAACTAGACTGTAAGTGCCTTGGGTCAGGGAC
TGAATCTTGCCGCTTATGTATGCTCCATGTCTAGCCATCATCTGCTTGGAGCAAGTA
GGCAGGAGCTCAATAAATGTTTGTGTCATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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Restriction Sites:

ECoRI-NOT

ACCN:

NM_001038

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 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_001038.4](#), [NP_001029.1](#)

RefSeq Size: 3171 bp

RefSeq ORF: 2010 bp

Locus ID: 6337

UniProt ID: [P37088](#)

Cytogenetics: 12p13.31

Domains: ASC

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Protein Pathways: Taste transduction

Gene Summary: Nonvoltage-gated, amiloride-sensitive, sodium channels control fluid and electrolyte transport across epithelia in many organs. These channels are heteromeric complexes consisting of 3 subunits: alpha, beta, and gamma. This gene encodes the alpha subunit, and mutations in this gene have been associated with pseudohypoaldosteronism type 1 (PHA1), a rare salt wasting disease resulting from target organ unresponsiveness to mineralocorticoids. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Apr 2009]
Transcript Variant: This variant (1, also known as alpha-ENaC1) represents the predominant transcript, and encodes isoform 1.