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Product datasheet for SC119542

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; LIDLS3; SCNEA; SCNN1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC119542 sequence for NM_001038 edited (data generated by NextGen Sequencing)

ATGGAGGGGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACTCCAGGGCTC
ATGAAGGGGAACAAGCGTGAGGAGCAGGGGCTGGGCCCCGAACCTGCGGCGCCCCAGCAG
CCCACGGCGGAGGAGGAGGCCCTGATCGAGTTCCACCGCTCCTACCGAGAGCTCTTCGAG
TTCTTCTGCAACAACACCACCATCCACGGCGCCATCCGCCTGGTGTGCTCCCAGCACAAC
CGCATGAAGACGGCCTTCTGGGCAGTGCTGTGGCTCTGCACCTTTGGCATGATGTACTGG
CAATTCGGCCTGCTTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAACATCAACCTC
AACTCGGACAAGCTCGTCTTCCCCGCAGTGACCATCTGCACCCTCAATCCCTACAGGTAC
CCGGAAATTAAAGAGGAGCTGGAGGAGCTGGACCGCATCACAGAGCAGACGCTCTTTGAC
CTGTACAAATACAGCTCCTTCACCACTCTCGTGGCCGGCTCCCGCAGCCGTCGCGACCTG
CGGGGGACTCTGCCGCACCCCTTGCAGCGCCTGAGGGTCCCGCCCCCGCCTCACGGGGCC
CGTCGAGCCCGTAGCGTGGCCTCCAGCTTGCGGGACAACAACCCCCAGGTGGACTGGAAG
GACTGGAAGATCGGCTTCCAGCTGTGCAACCAGAACAAATCGGACTGCTTCTACCAGACA
TACTCATCAGGGGTGGATGCGGTGAGGGAGTGGTACCGCTTCCACTACATCAACATCCTG
TCGAGGCTGCCAGAGACTCTGCCATCCCTGGAGGAGGACACGCTGGGCAACTTCATCTTC
GCCTGCCGCTTCAACCAGGTCTCCTGCAACCAGGCGAATTACTCTCACTTCCACCACCCG
ATGTATGGAAACTGCTATACTTTCAATGACAAGAACAACTCCAACCTCTGGATGTCTTCC
ATGCCTGGAATCAACAACGGTCTGTCCCTGATGCTGCGCGCAGAGCAGAATGACTTCATT
CCCCTGCTGTCCACAGTGACTGGGGCCCGGGTAATGGTGCACGGGCAGGATGAACCTGCC
TTTATGGATGATGGTGGCTTTAACTTGCGGCCTGGCGTGGAGACCTCCATCAGCATGAGG
AAGGAAACCCTGGACAGACTTGGGGGCGATTATGGCGACTGCACCAAGAATGGCAGTGAT
GTTCCTGTTGAGAACCTTTACCCTTCAAAGTACACACAGCAGGTGTGTATTCACTCCTGC
TTCCAGGAGAGCATGATCAAGGAGTGTGGCTGTGCCTACATCTTCTATCCGCGGCCCCAG
AACGTGGAGTACTGTGACTACAGAAAGCACAGTTCCTGGGGGTACTGCTACTATAAGCTC
CAGGTTGACTTCTCCTCAGACCACCTGGGCTGTTTCACCAAGTGCCGGAAGCCATGCAGC
GTGACCAGCTACCAGCTCTCTGCTGGTTACTCACGATGGCCCTCGGTGACATCCCAGGAA
TGGGTCTTCCAGATGCTATCGCGACAGAACAATTACACCGTCAACAACAAGAGAAATGGA
GTGGCCAAAGTCAACATCTTCTTCAAGGAGCTGAACTACAAAACCAATTCTGAGTCTCCC
TCTGTCACGATGGTCACCCTCCTGTCCAACCTGGGCAGCCAGTGGAGCCTGTGGTTCGGC
TCCTCGGTGTTGTCTGTGGTGGAGATGGCTGAGCTCGTCTTTGACCTGCTGGTCATCATG
TTCCTCATGCTGCTCCGAAGGTTCCGAAGCCGATACTGGTCTCCAGGCCGAGGGGGCAGG
GGTGCTCAGGAGGTAGCCTCCACCCTGGCATCCTCCCCTCCTTCCCACTTCTGCCCCCAC
CCCATGTCTCTGTCCTTGTCCCAGCCAGGCCCTGCTCCCTCTCCAGCCTTGACAGCCCCT
CCCCCTGCCTATGCCACCCTGGGCCCCCGCCCATCTCCAGGGGGCTCTGCAGGGGCCAGT
TCCTCCGCCTGTCCTCTGGGGGGGCCCTGA

Clone variation with respect to NM_001038.5
1987 a=>g

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001038 unedited
NTGTCAGNATTTGTATACGACTCCTATAGGCGGCCCGCGAATCGGCACCAGGGGACATGG
GCATGGCCAGGGGCAGCCTCACTCGGGTTCCAGGGGTGATGGGAGAGGGCACTCAGGGCC
CAGAGCTCAGCCTTGACCCTGACCCTTGCTCTCCCCAATCCACTCCGGGGCTCATGAAGG
GGAACAAGCTGGAGGAGCAGGACCCTAGACCTCTGCAGCCCATACCAGGTCTCATGGAGG
GGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACTCCAGGGCTCATGAAGG
GGAACAAGCGTGAGGAGCAGGGGCTGGGCCCCGAACCTGCGGCGCCCCAGCAGCCCACGG
CGGAGGAGGAGGCCCTGATCGAGTTCCACCGCTCCTACCGAGAGCTCTTCGAGTTCTTCT
GCAACAACACCACCATCCACGGCGCCATCCGCCTGGTGTGCTCCCAGCACAACCGCATGA
AGACGGCCTTCTGGGCAGTGCTGTGGCTCTGCACCTTTGGCATGATGTACTGGCAATTCG
GCCTGCTTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAACATCACCCTCAACTCGG
ACAAGCTCGTCTTCCCCGCAGTGACCATCTGCACCCTCAATCCCTACAGGTACCCGGAAA
TTAAAGAGGAGCTGGAGGAGCTGGACCGCATCACAGAGCAGACGCTCTTTGACCTGTACA
ATACAGCTCCTTCACCACTCTCGTGGCCGGCTCCCGCAGCCGTCGCGACCTGCGGNGGAC
TCTGCCGCACCCCTTGCAGCGCCCTGAGGTCCCGCCCCCGCCTCACGGNGCCCGTCGAGC
CCGTAACGTGGCCTCCAGCTTGCGGGGACACAACCCCCAGNTNACTGGAAGGACTGGNAG
ATCCGCTCCAGCTGTGCAACCAGACAAATCGACTGCTCTACCAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001038 unedited
CTATGAACCCGCGGCCGCAATCTAGNGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTCACAGCCAACAAACTTTTATGGAACCTCCTGCCTACTTGCTCCAAGCAGGA
AGAGGGGCTAAACATGGACCATCCTTAACCGGCCAAAATTCATCCCCTGACCGAAGGGCC
CTAACAGTTTATTGGGAAAGGGAAACCCAATGGTCCAAAAAAGTTTGGGGCAACACCACC
CCTCCACCAAATGTTATAGGGGCCTACGGAACCCCAGAAAAAGGCGGAGGGACCAATTTG
GGGAAAAACAAAATGGGGCAAAACCGTCCACAAAAGAAAGGGGGCCTGACCAGGGTTCTA
AGGAATCCATAGGATTCCTTGGGCAAAGGGTGGGGAAAACTTTAAGCCTGAGGAAATTCC
TAACCCAAACTTGTAAAGGTATAAAAAACCCAGGGCAAAGGGGCCGGGGCATGGTTTTGT
AAGGGCCCGGGTATAAGGCTAAAGGACCCCTGGTCCTGCTTTTACTTACCCGGGCCTGTT
CAAGCCTAATCCCTCGGGACCCAGGAAAGGGAATTTCCCCACCAACAATGGGCCCTTTGG
GCTCGGCTCCCCCCACATCTTCACCCCCAGCCCAACTTTCCTTCTCCCCCTCCCCTCCAC
ACCCTCACTATTCGCATCGTTCCCTCTCCCCCGCCCCTATCTCCTCCCCCCCATACCCCC
CCTTCCCCCTCTCTTTTCCCCTCTTTTTTTATCCTCACGCTTCCCTCCCCCCCCCATTTT
TCTCCTACCCCCCCCCCCCCCCTATTCCCCTCTCCTCTTCCCTTTCCTTAATCCCCGCTC
CCCCCCCATTCTCCCCCCCCTCCCCATCTATGTCAACCTCCACACCCCCCTCCCCCCTCC
CCCCTTCTTCCCCCTCCCCTCCACCTTCCCCACATCAAATCA

Restriction Sites: ECoRI-NOT

ACCN: NM_001038

Insert Size: 3080 bp

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
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.