OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC327190

epithelial Sodium Channel alpha (SCNN1A) (NM_001159576) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	epithelial Sodium Channel alpha (SCNN1A) (NM_001159576) Human Untagged Clone
Tag:	Tag Free
Symbol:	epithelial Sodium Channel alpha
Synonyms:	BESC2; ENaCa; ENaCalpha; LIDLS3; SCNEA; SCNN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001159576, the custom clone sequence may differ by one or more nucleotides

ATGGGCATGGCCAGGGGCAGCCTCACTCGGGTTCCAGGGGTGATGGGAGAGGGCACTCAGGGCCCAGAGC
TCAGCCTTGACCCTGACCCTTGCTCTCCCCAATCCACTCCGGGGCTCATGAAGGGGAACAAGCTGGAGGA
GCAGGACCCTAGACCTCTGCAGCCCATACCAGGTCTCATGGAGGGGAACAAGCTGGAGGAGCAGGACTCT
AGCCCTCCACAGTCCACTCCAGGGCTCATGAAGGGGAACAAGCGTGAGGAGCAGGGGCTGGGCCCCGAAC
CTGCGGCGCCCCAGCAGCCCACGGCGGAGGAGGAGGCCCTGATCGAGTTCCACCGCTCCTACCGAGAGCT
CTTCGAGTTCTTCTGCAACAACACCACCATCCACGGCGCCATCCGCCTGGTGTGCTCCCAGCACAACCGC
ATGAAGACGGCCTTCTGGGCAGTGCTGTGGCTCTGCACCTTTGGCATGATGTACTGGCAATTCGGCCTGC
TTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAACATCAACCTCAACTCGGACAAGCTCGTCTTCCC
CGCAGTGACCATCTGCACCCTCAATCCCTACAGGTACCCGGAAATTAAAGAGGAGCTGGAGGAGCTGGAC
CGCATCACAGAGCAGACGCTCTTTGACCTGTACAAATACAGCTCCTTCACCACTCTCGTGGCCGGCTCCC
GCAGCCGTCGCGACCTGCGGGGGACTCTGCCGCACCCCTTGCAGCGCCTGAGGGTCCCGCCCCCGCCTCA
CGGGGCCCGTCGAGCCCGTAGCGTGGCCTCCAGCTTGCGGGACAACAACCCCCAGGTGGACTGGAAGGAC
TGGAAGATCGGCTTCCAGCTGTGCAACCAGAACAAATCGGACTGCTTCTACCAGACATACTCATCAGGGG
TGGATGCGGTGAGGGAGTGGTACCGCTTCCACTACATCAACATCCTGTCGAGGCTGCCAGAGACTCTGCC
ATCCCTGGAGGAGGACACGCTGGGCAACTTCATCTTCGCCTGCCGCTTCAACCAGGTCTCCTGCAACCAG
GCGAATTACTCTCACTTCCACCACCCGATGTATGGAAACTGCTATACTTTCAATGACAAGAACAACTCCA
ACCTCTGGATGTCTTCCATGCCTGGAATCAACAACGGTCTGTCCCTGATGCTGCGCGCAGAGCAGAATGA
CTTCATTCCCCTGCTGTCCACAGTGACTGGGGCCCGGGTAATGGTGCACGGGCAGGATGAACCTGCCTTT
ATGGATGATGGTGGCTTTAACTTGCGGCCTGGCGTGGAGACCTCCATCAGCATGAGGAAGGAAACCCTGG
ACAGACTTGGGGGCGATTATGGCGACTGCACCAAGAATGGCAGTGATGTTCCTGTTGAGAACCTTTACCC
TTCAAAGTACACACAGCAGGTGTGTATTCACTCCTGCTTCCAGGAGAGCATGATCAAGGAGTGTGGCTGT
GCCTACATCTTCTATCCGCGGCCCCAGAACGTGGAGTACTGTGACTACAGAAAGCACAGTTCCTGGGGGT
ACTGCTACTATAAGCTCCAGGTTGACTTCTCCTCAGACCACCTGGGCTGTTTCACCAAGTGCCGGAAGCC
ATGCAGCGTGACCAGCTACCAGCTCTCTGCTGGTTACTCACGATGGCCCTCGGTGACATCCCAGGAATGG
GTCTTCCAGATGCTATCGCGACAGAACAATTACACCGTCAACAACAAGAGAAATGGAGTGGCCAAAGTCA
ACATCTTCTTCAAGGAGCTGAACTACAAAACCAATTCTGAGTCTCCCTCTGTCACGATGGTCACCCTCCT
GTCCAACCTGGGCAGCCAGTGGAGCCTGTGGTTCGGCTCCTCGGTGTTGTCTGTGGTGGAGATGGCTGAG
CTCGTCTTTGACCTGCTGGTCATCATGTTCCTCATGCTGCTCCGAAGGTTCCGAAGCCGATACTGGTCTC
CAGGCCGAGGGGGCAGGGGTGCTCAGGAGGTAGCCTCCACCCTGGCATCCTCCCCTCCTTCCCACTTCTG
CCCCCACCCCATGTCTCTGTCCTTGTCCCAGCCAGGCCCTGCTCCCTCTCCAGCCTTGACAGCCCCTCCC
CCTGCCTATGCCACCCTGGGCCCCCGCCCATCTCCAGGGGGCTCTGCAGGGGCCAGTTCCTCCACCTGTC
CTCTGGGGGGGCCCTGA

Restriction Sites: Please inquire

ACCN: NM_001159576

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_001159576.1, NP_001153048.1
RefSeq Size:	3497 bp
RefSeq ORF:	2187 bp
Locus ID:	6337
UniProt ID:	P37088
Cytogenetics:	12p13.31
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 (2, also known as alpha-ENaC2) contains an alternate segment in the 5' coding region, and uses an in-frame upstream start codon compared to variant 1. This results in an isoform (2) with a longer N-terminus compared to isoform 1.