

Product datasheet for **RG209564**

epithelial Sodium Channel alpha (SCNN1A) (NM_001038) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	epithelial Sodium Channel alpha (SCNN1A) (NM_001038) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	epithelial Sodium Channel alpha
Synonyms:	BESC2; ENaCa; ENaCalpha; LIDLS3; SCNEA; SCNN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG209564 representing NM_001038
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGGGGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACTCCAGGGCTCATGAAGGGGA
ACAAGCGTGAGGAGCAGGGGCTGGGCCCCGAACCTGCGGCGCCCCAGCAGCCACGGCGGAGGAGGAGGC
CCTGATCGAGTTCACCGCTCCTACCGAGAGCTTTCGAGTTCCTGCAACAACACCACCATCCACGGC
GCCATCCGCTGGTGTGCTCCCAGCACAACCGCATGAAGACGGCCTTCTGGGCAGTGCTGTGGCTGTGCA
CCTTTGGCATGATGACTGGCAATTCGGCTGCTTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAA
CATCAACCTCAACTCGGACAAGCTCGTCTTCCCCGAGTGACCATCTGCACCCTCAATCCCTACAGGTAC
CCGAAATTAAGAGGAGCTGGAGGAGCTGGACCGCATCACAGAGCAGACGCTCTTTGACCTGTACAAAT
ACAGCTCCTTACCAGTCTCGTGGCCGGCTCCCGCAGCCGTCGCGACCTGCGGGGGACTCTGCCGACCC
CTTGACAGCGCTGAGGGTCCCGCCCCGCTCACGGGGCCGTCGAGCCGTAGCGTGGCTCCAGCTTG
CGGACAACAACCCAGGTGGACTGGAAGGACTGGAAGATCGGCTTCCAGCTGTGCAACCAAGAACAAT
CGGACTGCTTCTACCAGACATACTCATCAGGGGTGGATGCGGTGAGGGAGTGGTACCGCTTCCACTACAT
CAACATCTGTGAGGCTGCCAGAGACTCTGCCATCCCTGGAGGAGGACACGCTGGGCAACTTCACTTTC
GCCTGCCGCTTCAACCAGGTCTCCTGCAACCAGGCGAATTACTCTCACTTCCACCACCCGATGTATGGAA
ACTGCTATACTTTCAATGACAAGAACAACCTCAACCTCTGGATGTCTTCCATGCCTGGAATCAACAACGG
TCTGTCCCTGATGCTGCGCGCAGAGCAGAATGACTTCAATCCCTGCTGTCCACAGTGACTGGGGCCCGG
GTAATGGTGCACGGGCAGGATGAACCTGCCTTATGGATGATGGTGGCTTAACTTGCAGCTGGCGTGG
AGACCTCATCAGCATGAGGAAGGAAACCTGGACAGACTTGGGGGCGATTATGGCGACTGCACCAAGAA
TGGCAGTGATGTTCCCTGTTGAGAACCTTACCCTTCAAAGTACACACAGCAGGTGTGTATTCACTCCTGC
TTCAGGAGAGCATGATCAAGGAGTGTGGCTGTGCCTACATCTTCTATCCGCGGCCCCAGAACGTGGAGT
ACTGTGACTACAGAAAGCACAGTTCCTGGGGTACTGCTACTATAAGCTCCAGGTTGACTTCTCCTCAGA
CCACCTGGGCTGTTTACCAAGTGCCGGAAGCCATGCAGCGTGACCAGCTACCAGCTCTCTGCTGGTTAC
TCACGATGGCCCTCGGTGACATCCAGGAATGGGTCTTCCAGATGCTATCGCGACAGAACAATTACACCG
TCAACAACAAGAGAAATGGAGTGGCCAAAGTCAACATCTTCTCAAGGAGCTGAATAAAAACCAATTC
TGAGTCTCCCTCTGTACGATGGTACCCTCCTGTCCAACCTGGCAGCCAGTGGAGCCTGTGGTTCGGC
TCCTCGGTGTTGTCTGTGGTGGAGATGGCTGAGCTCGTCTTTGACCTGCTGGTCATCATGTTCTCTATGC
TGCTCCGAAGGTTCCGAAGCCGATACTGGTCTCCAGGCCGAGGGGCGAGGGGTGCTCAGGAGGTAGCCTC
CACCTGGCATCCTCCCCTCCTTCCCCTTCTGCCCCACCCCATGTCTCTGTCTTGTCCAGCCAGGC
CCTGCTCCCTCTCCAGCCTTGACAGCCCCTCCCCTGCCTATGCCACCCTGGGCCCCCGCCATCTCCAG
GGGCTCTGCAGGGGCCAGTTCCTCCGCTGTCCTCTGGGGGGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG209564 representing NM_001038
 Red=Cloning site Green=Tags(s)

MEGNKLEEQDSSPPQSTPGLMKGNKREEQGLGPEPAAPQOPTAEEEEALIEFHRSYRELFEFFCNNTTIHG
 AIRLVCSQHNRMKTAFWAVLWLCTFGMMYWQFGLLFGEYFSYPVSLNINLNSDKLVFPAVTICTLNPYRY
 PEIKEELEELDRITEQTLFDLYKYSSFTLVAGSRSRDLRGTLPHPQLRVRPPPHGARRARSVASSL
 RDNNPQVDWKDWKIGFQLCNQNKSDCFYQTYSSGVDVREWYRFHYINILSRLPETLPSLEEDTLGNFIF
 ACRFNQVSCNQANYSHFHHPMYGNCYTFNDKNNNLWSSMPGINNGLSLMLRAEQNDFIPLLSTVTGAR
 VMVHGQDEPAFMDDGGFNLRPGVETISMRKETLDRLLGGDYGDCTKNGSDVPVENLYPSKYTQQVCIHSC
 FQESMIKECGCAYIFYPRPQNVEYCDYRKHSSWGVCYYKLQVDFSSDHLGCFTKCRKPCS SVTSYQLSAGY
 SRWPSVTSQEWVFQMLSRQNNYVNNKRNQVAKVNIFFKELNYKTNSESPSVTMVTLNLSGQSWLWFG
 SSVLVSVEMAELVFDLLVIMFLMLLRFRSRYWSPGRGGRGAQEVASTLASSPPSHFCPPHMSLSLQPG
 PAPPAL TAPPAYATLGPRPSPGGSAGASSACPLGGP

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001038

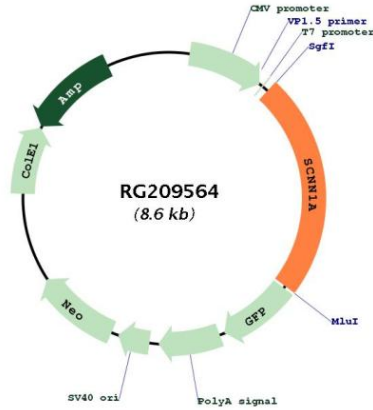
ORF Size: 2007 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	<ol style="list-style-type: none"> 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]

Product images:



Circular map for RG209564