

Product datasheet for **RC209564**

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:	Myc-DDK
Symbol:	SCNN1A
Synonyms:	BESC2; ENaCa; ENaCalpha; LIDL33; SCNEA; SCNN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

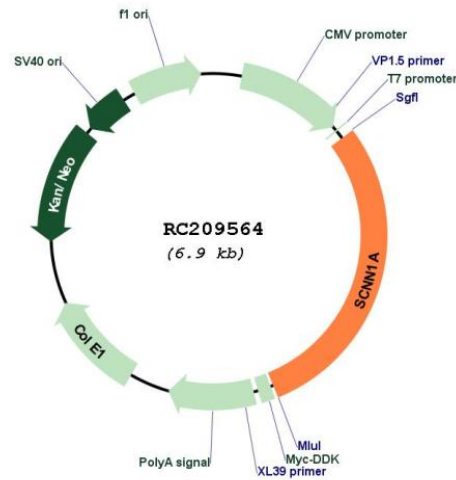
>RC209564 representing NM_001038
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGGGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACTCCAGGGCTCATGAAGGGGA
ACAAGCGTGAGGAGCAGGGGCTGGGCCCCGAACCTGCGGCGCCAGCAGCCACGGCGGAGGAGGAGGC
CCTGATCGAGTTCACCGCTCCTACCGAGAGCTTTCGAGTTCCTGCAACAACACCACCATCCACGGC
GCCATCCGCTGGTGTGCTCCCAGCACAACCGCATGAAGACGGCCTTCTGGGCAGTGCTGTGGCTGTGCA
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CAACATCTGTGAGGCTGCCAGAGACTCTGCCATCCCTGGAGGAGGACACGCTGGGCAACTTCACTTTC
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TGCTCCGAAGGTTCCGAAGCCGATACTGGTCTCCAGGCCGAGGGGCAGGGGTGCTCAGGAGGTAGCCTC
CACCTGGCATCCTCCCTCCTTCCCACTTCTGCCCCACCCCATGTCTCTGTCTTGTCCAGCCAGGC
CCTGCTCCCTCTCCAGCCTTGACAGCCCTCCCTGCTATGCCACCCTGGGCCCCCGCCATCTCCAG
GGGCTCTGCAGGGGCCAGTTCCTCCGCTGTCTCTGGGGGGCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Plasmid Map:



ACCN: NM_001038

ORF Size: 2007 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](#)

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:

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_001038.6](#)

RefSeq Size: 3171 bp

RefSeq ORF: 2010 bp

Locus ID: 6337

UniProt ID: [P37088](#)

Cytogenetics: 12p13.31

Domains: ASC

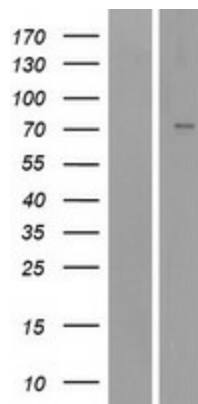
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Protein Pathways: Taste transduction

MW: 75.5 kDa

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:



Western blot validation of overexpression lysate (Cat# [LY422000]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209564 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).