

## Product datasheet for **RG228538**

### epithelial Sodium Channel alpha (SCNN1A) (NM\_001159575) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	epithelial Sodium Channel alpha (SCNN1A) (NM_001159575) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCNN1A
Synonyms:	BESC2; ENaCa; ENaCalpha; LIDLS3; SCNEA; SCNN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG228538 representing NM\_001159575  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGAGCAGTATCAAGGGGAACAAGCTGGAGGAGCAGGACCCTAGACCTCTGCAGCCCATACCAGGTCTCA  
 TGGAGGGGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACTCCAGGGCTCATGAAGGGGAA  
 CAAGCGTGAGGAGCAGGGGCTGGGCCCGAACCTGCGGCCCGCCAGCAGCCACGGCGGAGGAGGAGGCC  
 CTGATCGAGTTCCACCGCTCTACCGAGAGCTCTTCGAGTTCTTCTGCAACAACACCACCATCCACGGCG  
 CCATCCGCTGGTGTGCTCCCAGCACAACCGCATGAAGACGGCCTTCTGGGCAGTGTGTGGCTCTGCAC  
 CTTTGGCATGATGTACTGGCAATTCGGCCTGCTTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAAC  
 ATCAACCTCAACTCGGACAAGCTCGTCTCCCCGAGTGACCATCTGCACCCTCAATCCCTACAGGTACC  
 CGGAAATTAAGAGGAGCTGGAGGAGCTGGACCGCATCACAGAGCAGACGCTCTTTGACCTGTACAATA  
 CAGCTCCTTACCAGCTCTCGTGGCCGGTCCCGCAGCCGTCGCGACCTGCGGGGGACTCTGCCGCACCCC  
 TTGAGCGCCTGAGGGTCCCGCCCCCGCTCACGGGGCCCGTCGAGCCCGTAGCGTGGCCTCCAGCTTGC  
 GGGACAACAACCCCAAGGTGGACTGGAAGGACTGGAAGATCGGCTTCCAGCTGTGCAACCAGAACAATC  
 GGACTGCTTCTACCAGACATACTCATCAGGGGTGGATGCGGTGAGGGAGTGGTACCGCTTCCACTACATC  
 AACATCCTGTCGAGGCTGCCAGAGACTCTGCCATCCCTGGAGGAGGACACGCTGGGCAACTTCATCTTGC  
 CCTGCCGCTTCAACCAGGTCTCTGCAACCAGGCGAATTACTCTCACTTCCACCACCCGATGTATGGAAA  
 CTGCTATACTTTCAATGACAAGAACAACCTCAACCTCTGGATGTCTTCCATGCCTGGAATCAACAACGGT  
 CTGTCCCTGATGCTGCGCGCAGAGCAGAATGACTTCATCCCTGCTGTCCACAGTGACTGGGGCCCGGG  
 TAATGGTGCACGGGCAGGATGAACCTGCCTTTATGGATGATGGTGGCTTAACTTGCAGCCTGGCGTGA  
 GACCTCCATCAGCATGAGGAAGGAAACCCCTGGACAGACTTGGGGGCGATTATGGCGACTGCACCAAGAAT  
 GGCAGTGATGTTCTGTTGAGAACCTTTACCCTTCAAAGTACACACAGCAGGTGTGTATTCACTCCTGCT  
 TCCAGGAGAGCATGATCAAGGAGTGTGGCTGTGCCTACATCTTCTATCCGCGGCCCCAGAACGTGGAGTA  
 CTGTGACTACAGAAAGCAGATTCTGGGGGACTGCTACTATAAGCTCCAGGTTGACTTCTCTCAGAC  
 CACCTGGGCTGTTTACCAAGTGCCGGAAGCCATGCAGCGTGACCAGCTACCAGCTCTGCTGTTACT  
 CACGATGGCCCTCGGTGACATCCAGGAATGGTCTTCCAGATGCTATCGCGACAGAACAATTACACCGT  
 CAACAACAAGAGAAATGGAGTGGCAAAGTCAACATCTTCTTCAAGGAGCTGAACACAAAACCAATTCT  
 GAGTCTCCCTCTGTACGATGGTCACCCTCCTGTCCAACCTGGGCAGCCAGTGGAGCCTGTGGTTCCGGT  
 CCTCGGTGTTGTCTGTGGTGGAGATGGCTGAGCTCGTCTTTGACCTGCTGGTCATCATGTTCTCATGCT  
 GCTCCGAAGTTCGAAGCCGATACTGGTCTCCAGGCCGAGGGGGCAGGGGTGCTCAGGAGGTAGCCTCC  
 ACCCTGGCATCCTCCCCTCCTTCCCACTTCTGCCCCACCCCATGTCTCTGTCTGTCCCAGCCAGGCC  
 CTGCTCCTCTCCAGCCTTGACAGCCCCTCCCCCTGCCTATGCCACCCTGGGCCCCCGCCATCTCCAGG  
 GGGCTCTGCAGGGGCCAGTTCCTCCACCTGTCTCTGGGGGGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG228538 representing NM\_001159575  
 Red=Cloning site Green=Tags(s)

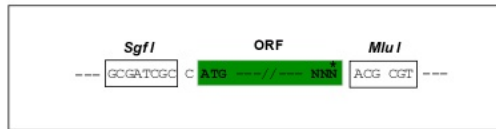
MSSIKGNKLEEQDPRPLQPIPLMEGNKLEEQDSSPPQSTPGLMKGNKREEQGLGPEPAAPQPTAEEEA  
 LIEFHRSYRELFEEFCNNTTIHGAI RL VCSQHNRMKTAFAWVWLWLCTFGMMYWQFGLLFGEYFSYPVSLN  
 INLNSDKLVFPVAVTICTLNPHYRYPEIKEELEELDRITEQTLFDLKYSSFTTLVAGSRSRDLRGLTLPHP  
 LQRLRVPPPHGARRARSVASSLRDNNPQVDWKDWKIGFQLCNQNKSDCFYQTYSSGVDVREWYRFHYI  
 NILSRLPETLPSLEEDTLGNFIFACRFNQVSCNQANYSHFHHPMYGNCYTFNDKNNSNLWMSSMPGINNG  
 LSLMLRAEQNDFIPLLSTVTGARVMVHGQDEPAFMDGGFNLRPGVETSISMRKETLDRLLGGDYGDCTKN  
 GSDVPLENLYPSKYTQQVCIHSCFQESMIKECGCAYIFYPRPQNVEYCDYRKHSSWGVCYKQLQVDFSSD  
 HLGCFTKCRKPCS SVTSYQLSAGYSRWPSVTSQEWVFQMLSRQNNYTVNNKRNGVAKVNIFFKELNYKTNS  
 ESPSVMTVLLSNLGSQWLSLWFGSSVLVSVEMAELVFDLLVIMFLMLLRRFRSRYWSPGRGGRGAQEAS  
 TLASSPPSHFCPPMSLSLSPGPAPSPALTAPPPAYATLGPRPSPGGSAGASSSTCPLGGP

TRTRPLE - GFP Tag - V

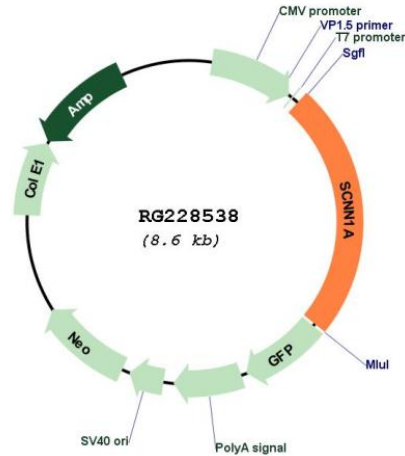
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM\_001159575

ORF Size: 2076 bp

OTI Disclaimer: 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\\_001159575.1](#), [NP\\_001153047.1](#)

RefSeq Size: 3216 bp

RefSeq ORF:	2079 bp
Locus ID:	6337
UniProt ID:	<a href="#">P37088</a>
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]