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# Product datasheet for RC207778

## SCN2B (NM_004588) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Tag:** | Myc-DDK |
| **Symbol:** | SCN2B |
| **Synonyms:** | ATFB14 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC207778 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCACAGAGATGCCTGGCTACCTCGCCCTGCCTTCAGCCTCACGGGGCTCAGTCTCTTTTTCTCTTTGG
TGCCACCAGGACGGAGCATGGAGGTCACAGTACCTGCCACCCTCAACGTCCTCAATGGCTCTGACGCCCG
CCTGCCCTGCACCTTCAACTCCTGCTACACAGTGAACCACAAACAGTTCTCCCTGAACTGGACTTACCAG
GAGTGCAACAACTGCTCTGAGGAGATGTTCCTCCAGTTCCGCATGAAGATCATTAACCTGAAGCTGGAGC
GGTTTCAAGACCGCGTGGAGTTCTCAGGGAACCCCAGCAAGTACGATGTGTCGGTGATGCTGAGAAACGT
GCAGCCGGAGGATGAGGGGATTTACAACTGCTACATCATGAACCCCCCTGACCGCCACCGTGGCCATGGC
AAGATCCATCTGCAGGTCCTCATGGAAGAGCCCCCTGAGCGGGACTCCACGGTGGCCGTGATTGTGGGTG
CCTCCGTCGGGGGCTTCCTGGCTGTGGTCATCTTGGTGCTGATGGTGGTCAAGTGTGTGAGGAGAAAAAA
AGAGCAGAAGCTGAGCACAGATGACCTGAAGACCGAGGAGGAGGGCAAGACGGACGGTGAAGGCAACCCG
GATGATGGCGCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC207778 protein sequence
Red=Cloning site Green=Tags(s)

MHRDAWLPRPAFSLTGLSLFFSLVPPGRSMEVTVPATLNVLNGSDARLPCTFNSCYTVNHKQFSLNWTYQ
ECNNCSEEMFLQFRMKIINLKLERFQDRVEFSGNPSKYDVSVMLRNVQPEDEGIYNCYIMNPPDRHRGHG
KIHLQVLMEEPPERDSTVAVIVGASVGGFLAVVILVLMVVKCVRRKKEQKLSTDDLKTEEEGKTDGEGNP
DDGAK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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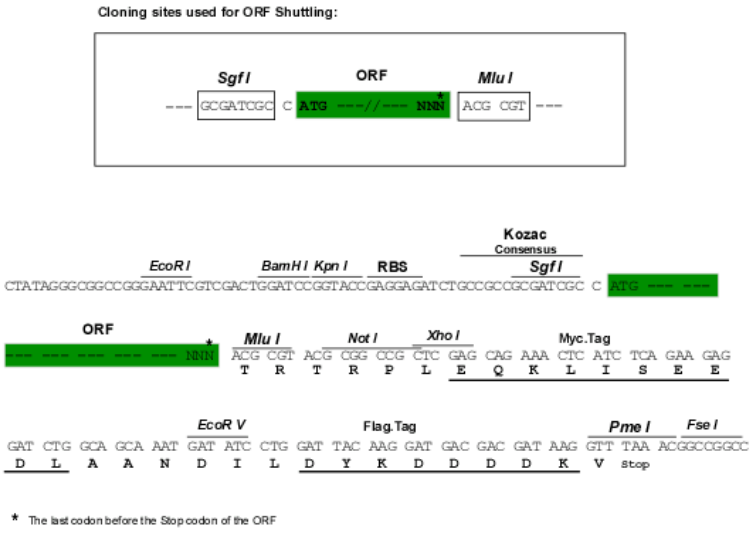
**Chromatograms:** https://cdn.origene.com/chromatograms/mk6135_d01.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_004588

**ORF Size:** 645 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** NM_004588.5

**RefSeq Size:** 4922 bp

**RefSeq ORF:** 648 bp

**Locus ID:** 6327

**UniProt ID:** O60939

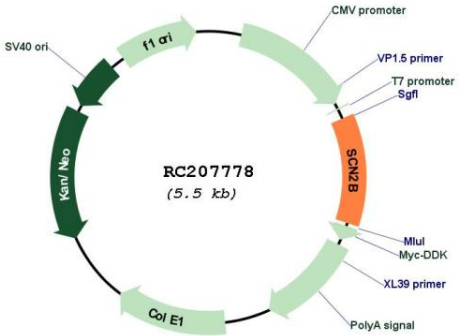
**Cytogenetics:** 11q23.3

**Protein Families:** Druggable Genome, Ion Channels: Sodium, Transmembrane

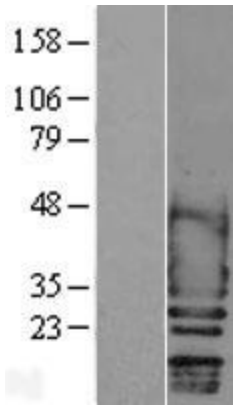
**MW:** 24.3 kDa

**Gene Summary:** The protein encoded by this gene is the beta 2 subunit of the type II voltage-gated sodium channel. The encoded protein is involved in cell-cell adhesion and cell migration. Defects in this gene can be a cause of Brugada Syndrome, atrial fibrillation, or sudden infant death syndrome. [provided by RefSeq, Jul 2015]

## Product images:




Circular map for RC207778




Western blot validation of overexpression lysate (Cat# [LY401455]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207778 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).