

## Product datasheet for **SC331452**

### SCN1A (NM\_001202435) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCN1A (NM_001202435) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCN1A
Synonyms:	DEE6; DEE6A; DEE6B; DRVT; EIEE6; FEB3; FEB3A; FHM3; GEFSP2; HBSCI; NAC1; Nav1.1; SCN1; SMEI
Vector:	pCMV6-Entry (PS100001)
Fully Sequenced ORF:	>SC331452 representing NM_001202435. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_001202435  
**Insert Size:** 6030 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001202435.1](#)  
**RefSeq Size:** 8342 bp  
**RefSeq ORF:** 6030 bp  
**Locus ID:** 6323  
**UniProt ID:** [P35498](#)  
**Cytogenetics:** 2q24.3  
**Protein Families:** Druggable Genome, Transmembrane  
**MW:** 229 kDa

**Gene Summary:**

Voltage-dependent sodium channels are heteromeric complexes that regulate sodium exchange between intracellular and extracellular spaces and are essential for the generation and propagation of action potentials in muscle cells and neurons. Each sodium channel is composed of a large pore-forming, glycosylated alpha subunit and two smaller beta subunits. This gene encodes a sodium channel alpha subunit, which has four homologous domains, each of which contains six transmembrane regions. Allelic variants of this gene are associated with generalized epilepsy with febrile seizures and epileptic encephalopathy. Alternative splicing results in multiple transcript variants. The RefSeq Project has decided to create four representative RefSeq records. Three of the transcript variants are supported by experimental evidence and the fourth contains alternate 5' untranslated exons, the exact combination of which have not been experimentally confirmed for the full-length transcript. [provided by RefSeq, Oct 2015]

Transcript Variant: This variant (4) represents a transcript with 5' untranslated exons, compared to variant 1. The RefSeq Project created this record to better support clinical studies but the exact combination of exons and splice sites still needs to be experimentally confirmed.