

## Product datasheet for MR222926

### Cacna1d (NM\_001083616) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna1d (NM_001083616) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacna1d
Synonyms:	8430418G19Rik; C79217; Cach3; Cacn; Cacn4; Cacn1a2; Cav1.3; Cchl; Cchl1; Cchl1a; Cchl1a2; D-LTC; D-LTCC
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR222926 representing NM_001083616 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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**Protein Sequence:**

>MR222926 representing NM\_001083616  
 Red=Cloning site Green=Tags(s)

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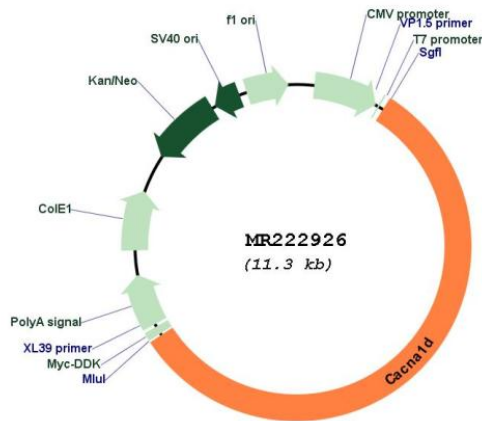
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001083616

ORF Size: 6432 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\\_001083616.2](#), [NP\\_001077085.1](#)

**RefSeq Size:** 9079 bp

**RefSeq ORF:** 6435 bp

**Locus ID:** 12289

**UniProt ID:** [Q99246](#)

**Cytogenetics:** 14 18.43 cM

**MW:** 243.6 kDa

**Gene Summary:** This gene encodes a pore-forming subunit of the L-type, voltage-activated calcium channel family. These channels have been found to play a role in heart and smooth muscle contraction and in the transmission of auditory information. Homozygous knockout mice for this gene exhibit deafness and heart defects. These channels have also been linked to mitochondrial oxidative stress in a mouse model of Parkinson's disease. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Nov 2014]