

Product datasheet for SC308956

OriGene Technologies, Inc.

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Calretinin (CALB2) (NM_007088) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Calretinin (CALB2) (NM 007088) Human Untagged Clone

Tag: Tag Free Symbol: CALB2

Synonyms: CAB29; CAL2; CR

Vector: <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM_007088, the custom clone sequence may differ by one or more

nucleotides

GCGGCTACATTGACGAGCATGAGCTGGATGCCCTTTTGA

Restriction Sites: Please inquire ACCN: NM 007088

OTI Disclaimer: 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 007088.1</u>, <u>NP 009019.1</u>

16q22.2

 RefSeq Size:
 1359 bp

 RefSeq ORF:
 579 bp

 Locus ID:
 794

 UniProt ID:
 P22676

Gene Summary:

Cytogenetics:

This gene encodes an intracellular calcium-binding protein belonging to the troponin C superfamily. Members of this protein family have six EF-hand domains which bind calcium. This protein plays a role in diverse cellular functions, including message targeting and intracellular calcium buffering. It also functions as a modulator of neuronal excitability, and is a diagnostic marker for some human diseases, including Hirschsprung disease and some cancers. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010]

Transcript Variant: This variant (CALB2c) lacks an alternate segment in the 3' coding region, which results in a frameshift and an early stop codon, compared to variant 1. The resulting protein (isoform 22k) has a shorter and distinct C-terminus, compared to isoform 1. There are no publicly available transcripts supporting this variant; it is represented based on data in PMID:7607211.