

## Product datasheet for **RG201924**

### Calretinin (CALB2) (NM\_001740) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calretinin (CALB2) (NM_001740) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Calretinin
Synonyms:	CAB29; CAL2; CR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201924 representing NM_001740 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGGCCCGCAGCAGCAGCCCTTACCTGCACCTGGCCGAGCTGACGGCGTCCCAGTTCCTGGAAA  
TATGGAAGCACTTTGACGCAGACGGAAATGGGTATATTGAAGGTAAGAGCTAGAAAACCTTTTCCAAGA  
GCTGGAGAAGGCAAGGAAAGGCTCTGGCATGATGTCAAAGAGTGACAACCTTGGAGAAAAGATGAAGGAG  
TTCATGCAGAAGTATGATAAAAACCTCAGATGGGAAAATCGAGATGGCAGAGCTGGCGCAGATCCTGCCAA  
CCGAAGAGAAGTTCCTTCTGTGCTTCAGGCAGCACGTGGGCTCCAGCACCGAGTTTATGGAGGCTTGGCG  
GAAGTACGACACAGACAGGAGTGGCTACATCGAAGCCAATGAGCTCAAGGGATTCCTGTGACACCTGCTG  
AAGAAGGCGAACCAGCCGTACGATGAGCCCAAGCTCCAGGAATACACCCAAACCATACTACGGATGTTTG  
ACTTGAACGGGGATGGCAAATTGGGCTCTCAGAGATGTCCCAGCTCCTGCCTGTCCAGGAAAACCTCCT  
GCTTAAATTTTCAGGGCATGAAGCTGACCTCAGAGGAGTTTAAACGCGATCTTCACATTTTACGACAAGGAT  
AGAAGCGGCTACATTGACGAGCATGAGCTGGATGCCCTTTTGAAGGATCTGTACGAGAAAAACAAAAAGG  
AAATGAATATTCAACAGCTCACCAACTACAGAAAGAGCGTCATGTCTTGGCAGAGGCAGGGAAGCTCTA  
CCGAAGGACCTGGAGATTGTGCTCTGCAGCGAGCCCCCATG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG201924 representing NM\_001740  
Red=Cloning site Green=Tags(s)

MAGPQQPPYLHLAELTASQFLEIWKHFDADGNGYIEGKELENFFQELEKARKGSGMMSKSDNFGEKMKE  
 FMQKYDKNSDGKIEMAELAQILPTEENFLLCFRQHVGSSSTEFMEAWRKYDTRSGYIEANELKGFLLSDDL  
 KKANRPYDEPKLQEYQTILRMFDLNGDGKLGLEMSRLLPVQENFLLKFQGMKLTSEEFNAIFTFYDKD  
 RSGYIDEHELDALLKDLYEKKNKEMNIQQLTNYRKSVMSLAEAGKLYRKDLEIVLCSEPPM

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001740

**ORF Size:** 813 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\\_001740.2](#), [NP\\_001731.1](#)

**RefSeq Size:** 1453 bp

**RefSeq ORF:** 816 bp

**Locus ID:** 794

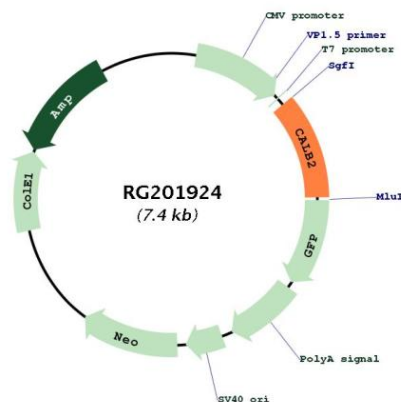
**UniProt ID:** [P22676](#)

**Cytogenetics:** 16q22.2

**Domains:** EFh

**Gene Summary:** 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]

### Product images:



Circular map for RG201924