

## Product datasheet for RC211229

### Calcium Sensing Receptor (CASR) (NM\_000388) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calcium Sensing Receptor (CASR) (NM_000388) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calcium Sensing Receptor
Synonyms:	CAR; EIG8; FHH; FIH; GPRC2A; hCasR; HHC; HHC1; HYPOC1; NSHPT; PCAR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211229 representing NM_000388 Red=Cloning site Blue=ORF Green=Tags(s)

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ATCATCAACTGGCACCTCTCCCCAGAGGATGGCTCCATCGTGTAAAGGAAGTCGGGTATTACAACGTCT  
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**Protein Sequence:**

>RC211229 representing NM\_000388  
 Red=Cloning site Green=Tags(s)

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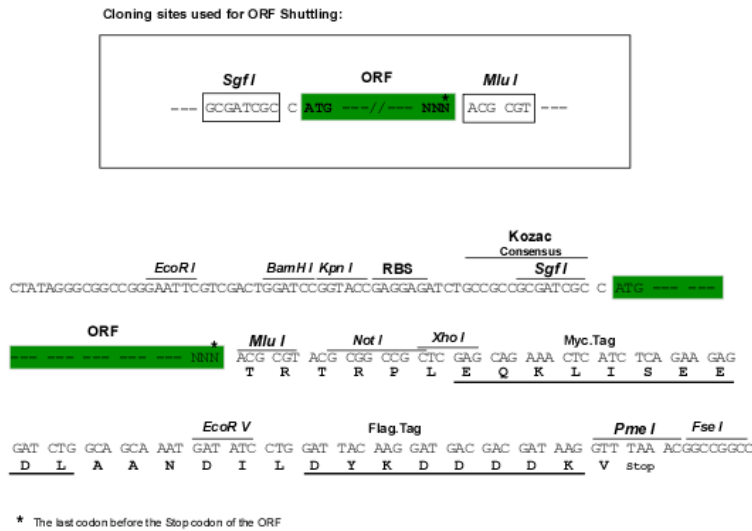
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**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2513\\_d01.zip](https://cdn.origene.com/chromatograms/mg2513_d01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000388

**ORF Size:** 3234 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.

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

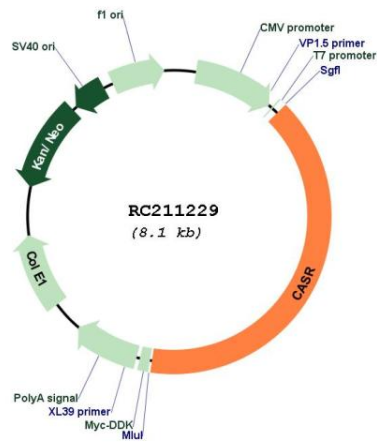
**RefSeq:** [NM\\_000388.3](#)

**RefSeq Size:** 4913 bp

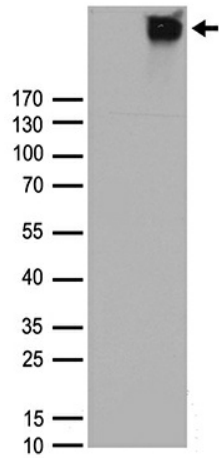
**RefSeq ORF:** 3237 bp

**Locus ID:** 846  
**UniProt ID:** [P41180](#)  
**Cytogenetics:** 3q13.33-q21.1  
**Protein Families:** Druggable Genome, GPCR, Transmembrane  
**MW:** 120.5 kDa  
**Gene Summary:** The protein encoded by this gene is a plasma membrane G protein-coupled receptor that senses small changes in circulating calcium concentration. The encoded protein couples this information to intracellular signaling pathways that modify parathyroid hormone secretion or renal cation handling, and thus this protein plays an essential role in maintaining mineral ion homeostasis. Mutations in this gene are a cause of familial hypocalciuric hypercalcemia, neonatal severe hyperparathyroidism, and autosomal dominant hypocalcemia. [provided by RefSeq, Aug 2017]

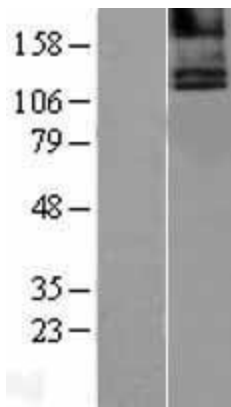
**Product images:**



Circular map for RC211229



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CASR (Cat# RC211229, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CASR antibody (Cat# [TA890014]). Positive lysates [LY400136] (100ug) and [LC400136] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400136]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211229 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).