

Product datasheet for SC119946

Calcium Sensing Receptor (CASR) (NM_000388) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calcium Sensing Receptor (CASR) (NM_000388) Human Untagged Clone
Tag:	Tag Free
Symbol:	Calcium Sensing Receptor
Synonyms:	CAR; EIG8; FHH; FIH; GPRC2A; hCasR; HHC; HHC1; HYPOC1; NSHPT; PCAR1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119946 sequence for NM_000388 edited (data generated by NextGen Sequencing)

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ATGGCATTATAGCTGCTGCTGGGTCCTCTTGGCACTCACCTGGCACACCTCTGCCTAC
GGGCCAGACCAGCGAGCCAAAAGAAGGGGACATTATCCTTGGGGGCTCTTCCCTATT
CATTTTGGAGTAGCAGCTAAAGATCAAGATCTCAAATCAAGGCCGGAGTCTGTGGAATGT
ATCAGGTATAATTTCCGTGGGTTTCGCTGGTTACAGGCTATGATATTTGCCATAGAGGAG
ATAAACAGCAGCCAGCCCTTCTCCCACTTGACGCTGGGATACAGGATATTTGACACT
TGCAACACCGTTTCTAAGGCCTTGAAGCCACCCTGAGTTTTGTTGCTCAAAAACAAAATT
GATTCTTTGAACCTTGATGAGTTCTGCAACTGCTCAGAGCACATTCCTCTACGATTGCT
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TACATTCCCAGTCTAGTTATGCCTCCTCCAGCAGACTCCTCAGCAACAAGAATCAATTC
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CAAGAAGGTGCAAAGGACCTTTACCTGTGGACACCTTTCTGAGAGGTCCGAAGAAAGT
GGCGACAGGTTTAGCAACAGCTCGACAGCCTTCCGACCCCTCTGTACAGGGGATGAGAAC
ATCAGCAGTGTGAGACCCCTTACATAGATTACACGCATTTACGGATATCCTACAATGTG
TACTTAGCAGTCTACTCCATTGCCACGCCTTGAAGATATATACCTGCTTACCTGGG
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GGCTCCATCGTGTTTAAGGAAGTCGGGTATTACAACGTCTATGCCAAGAAGGGAGAAAGA
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TGCTGCTTTGAGTGTGTGGAGTGTCTGATGGGGAGTATAGTGATGAGACAGATGCCAGT
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CGGCCAGAGGTGGAGGACCCTGAAGAGTTGTCCCAGCACTTGTAGTGTCCAGTTCACAG
AGCTTTGCATCAGTGGTGGAGGCAGCACTGTTACAGAAAACGTAGTGAATTCATAA
    
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Clone variation with respect to NM_000388.3

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_000388 unedited
CCATTCAGATTTGTATACGATTCATATAGGCGGCCTGCGAATTCGCACCAGCTTTTCGCGC
TAGAGAGTGGAAGGAGGGAGCTGTTTGCCAGCACCGAGGTCTTGCGGCACAGGCAACGCT
TGACCTGAGTCTTGCAGAATGAAAGGCATCACAGGAGGCCTCTGCATGATGTGGCTTCCA
AAGACTCAAGGACCACCCACATTACAAGTCTGGATTGAGGAAGGCAGAAATGGAGATTCA
AACACCACGTCTTCTATTATTTTATTAATCAATCTGTAGACATGTGTCCCCTACTGCAGGG
AGTGAACCTGCTCCAAGGGAGAACTTCTGGGAGCCTCAAACCTCCTAGCTGTCTCATCCC
TTGCCCTGGAGAGACGGCAGAACCATGGCATTATATAGCTGCTGCTGGGTCTTCTGGCA
CTCACCTGGCACACCTCTGCCTACGGGCCAGACCAGCGAGCCAAAAGAAGGGGGACATT
ATCCTTGGGGGGCTCTTTCTATTATTTTGGAGTAGCAGCTAAAGATCAAGATCTCAAA
TCAAGGCCGGAGTCTGTGGAATGTATCAGGTATAATTTCCGTGGGTTTCGCTGGTTACAG
GCTATGATATTTGCCATAGAGGAGATAAACAGCAGCCAGCCCTTCTCCACACTTGACG
CTGGGATACAGGATATTTGACACTTGCAACACCGTTTCTAAGGCCTTGAAGCCACCCTG
AGTTTTGTGCTCAGAACAAAATTGATTCTTTGAACCTTGATGAGTTCTGCAACTGCTCA
GAGCACATTCCTCTACGATTGCTGTGGTGGGAGCAACTGGCTCAGGCGTCTCCCGGACG
TGGCACTCTGCTGNGCTCTTCTACATCCCNAGTCAGACTTGCTNCTNCAGCAGATNCT
CAGCACTAGATT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_000388 unedited AAATACGTTGAACCGCGGCCGCTATCTACGAGCGNGGNATTTTTTTTTTTTTTTTTTGGC TCTTCTTTTTTTTAAATTTAAAGGGAACATGGGTCAATTCACCTGTCATTTAAGATGGTG TGACTAAATTCGGGGCATTGATGTGTCTATTATCCCTTCTTCCCTCAGAGGAAAGGAGTC TGGGGCGATTCCATCCCTGGGACCCCAAGAACCTCTCTGCATTCTCCCTAGCCCAGG CTTCTCCTTCCATTTTATGAATTCACACTACGTTTTCTGTAACAGTGTCTCCACCCTG ATGACAAAGCTCTGTGAAGTGGACACTACAAGTGTGGGACAACCTTTCAGGGTCTCC ACCTCTGGCCGCTGGTCTCCACCCACAGGTCTTGACAGACCTGTTTCTGGACGGTCAGA TCTAAGTCCGTTTTCCCCGCACTGCAGCGGGAGTAAATGGCTGGTGTGCGGTGAGCGTATCG CTGCTTTTCTGGGCTCCAGGGAGTTCTGGTGCCTAAAATTCCTGTGGCCATGGCGTTC TTCTGAGGCTCATCAAAGCTCAGTGAGAAGGTGACCGTGGCGCTGCCAAAGATGACCTTC TGCTTGCATCTGGGCTGCTGCTGAGATCGTTGCTGCTGTGGGAGGGTCAGGGGCTGCTGC TGCTGCTCTTGTGGGATAGGGCAACGGCTGCTGCTGCTTCTGCCTCTCGGGCTGTGGG AATGGGTCTTCGCTGTTGCTCTTGTGCTGATGGAGGAGAGGGGGTTGGATCCTCGTGG AGCCTCCTAGGCTGCTGNACCGTTGCTGGAAGACGTTGCTGCNGCGCCACCGTGCCTG GCAGCCACTTTAAAGCGTGAGCTGCGGTGCTGCACGCACTCCCCAGGTGTTCCGGAAT GGCTTAAAGAGGAAGTNCATTTGTTGAAAAAC
Restriction Sites:	Please inquire
ACCN:	NM_000388
Insert Size:	3500 bp
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).
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:	<ol style="list-style-type: none"> 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_000388.2</u> , <u>NP_000379.2</u>
RefSeq Size:	4913 bp
RefSeq ORF:	3237 bp
Locus ID:	846
UniProt ID:	<u>P41180</u>
Cytogenetics:	3q13.33-q21.1
Protein Families:	Druggable Genome, GPCR, Transmembrane

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]

Transcript Variant: This variant (2) has an alternate 5' UTR exon and lacks an in-frame segment in the CDS, as compared to variant 1. The resulting isoform (2) is shorter and lacks an internal segment, as compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.