

Product datasheet for MC223475

Casr (NM_013803) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Casr (NM_013803) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Casr
Synonyms:	CaR; Gprc2a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223475 representing NM_013803 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCATGGTTTGGCTACTGTTTGGCCCTCCTGGCTCTCACCTGGCACTCCTCTGCCTATGGCCTGACC
AGCGAGCCAAAAGAAGGGGACATTATCCTAGGAGTCTCTTTCCTATCCATTTGGAGTAGCAGCCAA
AGATCAAGATCTGAAGTCAAGACCAGAGTCTGTGGAGTGCATCAGGTATAACTCCGTGGATTCCGATGG
TTACAAGCCATGATCTTTGCCATAGAGGAGATAAACAGCAGCCCCGCCCTTCTTCCAACATGACTCTGG
GATATAGGATATTCGACACCTGTAACACCGTCTCCAAGGCTCTGGAGGCCACCTTGAGTTTTGTTGCCCA
GAACAAAATCGATTCTCTGAACCTGGATGAGTTCTGCAACTGCTCCGAGCACATCCCTTCAACCATCGCA
GTGGTGGGAGCAACCGGCTCCGGTGTCTCCACAGCGGTAGCCAACCTGCTGGGACTTTTTCTATATCCCC
AGGTGAGCTACGCCTCCTCTAGCAGGCTTCTCAGCAATAAGAACCAGTTCAAGTCCCTCCGACCAT
TCCAACGACGAACACCAGGCCACCGCATGGCTGACATTATCGAGTATTTCCGTTGGAAGTGGGTGGG
ACAATTGCAGCCGACGACGACTATGGCAGGCTGGCATTGAGAAGTCCGAGAGGAAGCCGAGGAGAGGG
ACATCTGCATTGACTTCAGCGAGCTCATCTCCAGTACTCTGATGAGGAAGAGATCCAGCAGGTGGTGG
AGTGATCCAGAAGTCTACAGCCAAGTCAATGTCGTTTTCTCCAGCGGCCAGACCTAGAACCTCTCATC
AAGGAGATTGTGCGCCGTAACATCACAGCAGGATCTGGCTGGCCAGCGAGGCCCTGGGCCAGTTCCCTCCC
TGATTGCTATGCCTGAGTACTTCCATGTAGTCGGGGTACCATTGGGTTCCGGTCTGAAGGCTGGGCAGAT
TCCAGGCTCCGAGAATTCTACAGAAAGTCCATCCCAGGAAGTCTGTCCACAATGGTTTTGCCAAAGAG
TTTTGGGAAGAAACATTTAATTGCCACCTGCAAGACGGCGCAAAAGGACCTTTACCCGTGGACACCTTCG
TGAGAAGTACGAGGAAGGCGCAACAGGTTACTCAATAGCTCCACTGCCTCCGACCCCTCTGCACGGG
GGATGAAAACATCAATAGTGTGAGACCCCTTACATGGACTACGAACATTTACGGATATCTACAACGTG
TACTTAGCCGTCTACTCCATTGCGCACGCCCTGCAAGATATATACACCTGCTTACCCGGAAGAGGGCTTT
TCACCAACGGGTCTGTGCAGACATCAAGAAGGTTGAGGCCTGGCAGGTCTGAAACACCTACGGCACCT
GAATTTACCAACAACATGGGGAGCAGGTGACCTTCGATGAGTCCGGTACCTGGTGGGAACTACTCC



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ATCATCAACTGGCACCTCTCCCCAGAGGACGGCTCCATTGTGTTCAAGGAAGTTGGGTAACAATGTGT
 ATGCCAAGAAGGGAGAAAGACTGTTTCATCAATGAGGGGAAGATCTTGTGGAGTGGGTTCTCCAGAGAGGT
 GCCCTTCTCCAAGTGCAGCCGGGACTGTGAGGCAGGGACCAGGAAGGGCATATTGAGGGAGAGCCCACC
 TGCTGTTTTGAGTGTGTGGAGTGTCTGACGGCGAGTACAGTGGTGAGACAGATGCGAGTGCCTGTGACA
 AGTGCCCGGATGACTTCTGGTCCAATGAGAACCACACTTCTGCATTGCCAAGGAGATTGAGTTCCTGGC
 GTGGACTGAGCCCTTTGGAATCGCTCTCACTCTTTTCCGGTGTGGGCATTTTCTGACCGCCTTTGTG
 CTGGGCGTCTTTCATCAAGTTCCGAAACACGCCCATTTGTCAAGGCCACCAACCGAGAGCTGCCTACCTCC
 TGCTTTCTCACTCCTCTGCTGCTTCTCCAGCTCCCTGTTCTTCAATTGGGGAGCCCCAGGACTGGACCTG
 CCGCTGCGACAGCCCGCTTCCGCATCAGCTTCTGTGCTTGTATCTCGTGCATCTTGGTGAAGACCAAT
 CGAGTCTCTGTTATTTGAGGCCAAAATACCCACCAGCTTCCACCGAAGTGGTGGGGACTCAACCTGC
 AGTTCTGCTGTTTTCTCTGCACCTTATGCAGATTGCATCTGCATCATCTGGCTCTACACGGCACC
 CCCCTCCAGTACCGCAACCACGAGCTGGAAGACGAAATCATCTTCATCACGTGCCATGAGGGCTCACTC
 ATGGCGCTCGGCTCCCTGATCGGCTACACCTGCCTCCTGGCTGCCATCTGCTTCTTTGCCTCAAGT
 CTCGGAAGCTGCCAGAGAACTTCAACGAAGCCAAGTTCATTACCTTCAGCATGCTCATCTTCTTCATCGT
 CTGGATCTCCTTATTCCAGCCTATGCCAGCACCTACGGCAAGTTTGTCTCTGCCGTGGAGGTGATCGCC
 ATCCTGGCAGCCAGCTTTGGCTTGTAGCTGCATCTTCTTCAACAAGGTCTACATCATCTCTTCAAGC
 TTTCACGGAACACCATCGAGGAGGTGCGCTCCAGCACTGCGGCTCATGCTTTCAAAGTGGCAGCCCGCGC
 CACTCTACGCCGCCCAACATCTCCCGAAGCGGTCCAGCAGCCTCGGAGGCTCCACTGGGTCGATTCCC
 TCCTCCTCCATCAGCAGCAAAAGCAACAGCGAAGACCGGTTCCACAGCCGGAGAGGCAGAAGCAACAGC
 AACCACTGGCCCTGACCCAGCAAGAAGCAGCAGCAGCAGCCCTGACTCTCCAGCCGAGCAACAGCAACA
 GCCACAGCAGCCGAGATGCAAAAGCAAGGTCATCTTCCGAGTGGCAGCAGTACCTTCTCTGAGCTTT
 GATGAGCCTCAGAAGAATGCTATGGCCACAGGAACTCCATGCCAGAACTCCCTGGAGGCCAGAAAGCA
 GCAATGACACTTTGAACAGACACCAGGCCCTGCTTCCCTACAGTGTGCAGAGGGGACTCAGAAATGAC
 CATTGAGGAGACGGCTTCAAGGGCCAATGGTGGGGACCACCGCCAGAAATAGAAAGCCAGATGAA
 ATGTCCCAGCTCTGGTATGTCCACCTCTCGGAGCTTCTCATCAGCGGTGGAGGTAGCTCTGTGACGG
 AAAACATACTGCACTCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja2349_c01.zip

Restriction Sites: SgfI-MluI

ACCN: NM_013803

Insert Size: 3240 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_013803.2</u> , <u>NP_038831.2</u>
RefSeq Size:	4549 bp
RefSeq ORF:	3240 bp
Locus ID:	12374
UniProt ID:	<u>Q9QY96</u>
Cytogenetics:	16 25.57 cM
Gene Summary:	G-protein-coupled receptor that senses changes in the extracellular concentration of calcium ions and plays a key role in maintaining calcium homeostasis (By similarity). Senses fluctuations in the circulating calcium concentration and modulates the production of parathyroid hormone (PTH) in parathyroid glands (PubMed:7493018). The activity of this receptor is mediated by a G-protein that activates a phosphatidylinositol-calcium second messenger system (By similarity). The G-protein-coupled receptor activity is activated by a co-agonist mechanism: aromatic amino acids, such as Trp or Phe, act concertedly with divalent cations, such as calcium or magnesium, to achieve full receptor activation (By similarity). [UniProtKB/Swiss-Prot Function]