

## Product datasheet for **RR217339**

### **Gprc6a (NM\_001271106) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gprc6a (NM_001271106) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gprc6a
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>RR217339 representing NM\_001271106  
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGGATCGCC**

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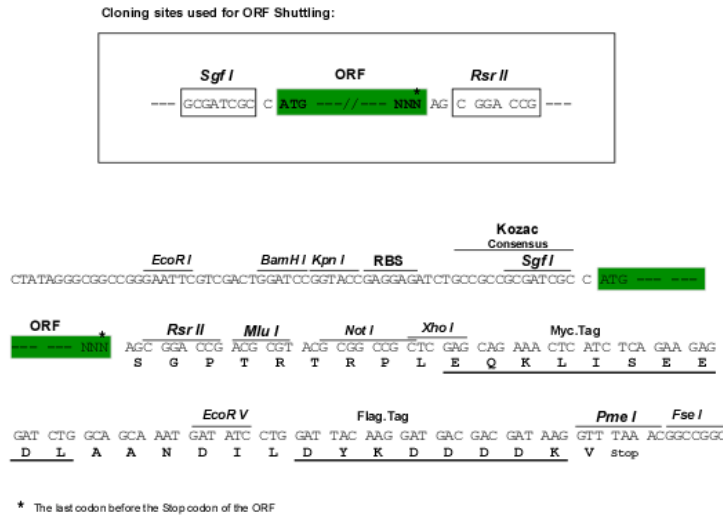
Protein Sequence: >RR217339 representing NM\_001271106  
 Red=Cloning site Green=Tags(s)

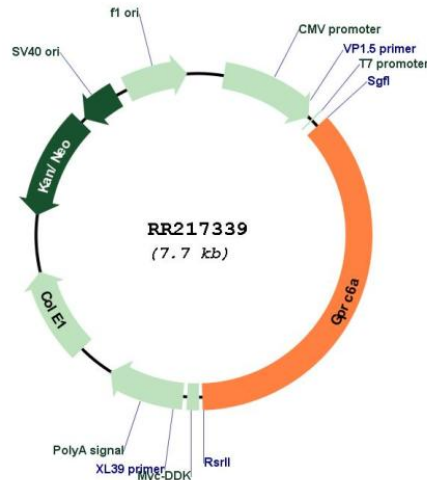
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 VGAITDDDDYGRALALNTFAIQAENNVCI AFKEVLPALFSDNTIEVRINQTLLEKIIAEAQVNVIVVFLRK  
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 EKTMHASKTLHQKRSSSI

SGP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001271106

**ORF Size:** 2784 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](mailto: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](#)

**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\\_001271106.1](#), [NP\\_001258035.1](#)

RefSeq Size: 3033 bp

RefSeq ORF: 2787 bp

Locus ID: 294394

UniProt ID: [Q70VB1](#)

Cytogenetics: 20q11

MW: 104.4 kDa

**Gene Summary:** Receptor activated by amino acids with a preference for basic amino acids such as L-Lys, L-Arg and L-ornithine but also by small and polar amino acids. The L-alpha amino acids response is augmented by divalent cations Ca(2+) and Mg(2+). Activated by extracellular calcium and osteocalcin. Seems to act through a G(q)/G(11) and G(i)-coupled pathway. Mediates the non-genomic effects of androgens in multiple tissue. May coordinate nutritional and hormonal anabolic signals through the sensing of extracellular amino acids, osteocalcin, divalent ions and its responsiveness to anabolic steroids (By similarity).[UniProtKB/Swiss-Prot Function]