

Product datasheet for **MR226201**

Gprc6a (NM_153071) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gprc6a (NM_153071) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gprc6a
Synonyms:	MGC124360
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR226201 representing NM_153071
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCCTATTGATTACAGTAGTTACTTGCTTCATGATTATTCTTGATACCTCCCAGTCTTGTCATACCC
 CAGATGACTTCGTGGCTATCACTTCTCCTGGACATATCATGATTGGTGGCTTGTTTGCCATTCATGAAAA
 AATGTTGTCTCAGATGACCATCCCAGACGACCACAAATCCAGAAATGTGCTGGCTTTGAAATATCAGTG
 TTTCTTCAAACCTCGGCTATGATACACAGCATTGAGATGATCAATAATTCAACACTGTTATCCGGAGTCA
 AGCTGGGATATGAAATCTATGACACTTGTACCGAAGTCACAGCAGCAATGGCTGCCACTCTGAGGTTCTT
 CTCAAATTCAACTGCTCTAGAGAACTGTGGTCTTTCAGTGTGACTATTCCAGCTACATGCCAAGGGTC
 AAGGCTGCATAGGTGCTGGCTACTCTGAAACATCCATCGCGGTCTCAAGGATGCTGAACTTACAGCTCA
 TGCCACAGGTGAGTTATGAATCCACTGCAGAAATCCTGAGTGACAAGATCCGCTTTCCTTCATTTTTACG
 GACTGTGCCTAGTGACTTCTACCAAACAAAGCAATGGCCACCTGATCCGACAATCGGGATGGAAGTGG
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 AAAACAATGTGTGCATTGCCTTCAAAGAGGTTCTGCCAGCCTTCTCTCAGATAATACCATTGAAGTGAG
 AATTAACCAGACTCTGGAGAAGATCATTGCAGAAGCCAGGTTAATGTCATTGTGGTGTTTCTGAGAAAA
 TTCCATGTTTTCAATCTCTTACGAAAGCCATTGAAAGGAAAAAAGTAAGATCTGGATTGCTAGTGATA
 ATTTGGTCAACCGTACCAAGATTATCACCATCCCTAATGTTAAGAAGCTTGGCAAAGTGGTGGGTTTGC
 CTTTAGGAGAGGAAATACGTCTTCTTCCATTCTTTCTTCAAACCTCTGCATATGACCCCAATGACAAT
 AACAAACCCCTACATGAATTTGCCATGCTCGTTTCTGCCTGTAATACATCAAAGACGGTGATTTGAGCC
 AATGCATATCCAACATTTCTCAGGCAACTTTGACCTATGACACTACCAAGACCATTGAAACCACTTATT
 CAAGAGAAATGATTTCTCTGGCATTATACTGAGCCGGGACTCATTTATAGCATTAGCTTGCAGTGTTTC
 GCCCTTGGTCATGCCATCCGGGATCTGTGCCAAGCTCGAGACTGCAAGAAACCAACGCCTTTCAGCCAT
 GGGAGCTACTTGGCGTGTGAAAAACGTGACATTCACTGATGGAAGGAATTCATTTCACTTTGATGCCCA
 CGGGGATTTAAATACTGGTTATGACGTGGTGTCTGGAAGGAGACCAATGGCCTCATGACTGTCACAAAG
 ATGGCAGAATATGACCTGCAGCGTGACGTCTTCAACACAAACCAAGAAACAAACATGAATTCAGGA
 AACTTAAGCAAATCTATCTAAATGCTCCAAGGAATGCAGCCCTGGTCAAATGAAGAAAGCCACAGGAAG
 CCAACACAGCTGTTGCTATGAATGTGTGAGCTGCCAGAAAACCACTACAGTAATGAGACAGATATGGAT
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 TGTTCGGCCATTGGCATAATATTTACAAGAACTGAAGACACCTGTCGTGAAATCATCTGGAGGATTA
 GTGGTCTGCTACGTGATGCTCATCTGCCAGCCCTTAACTTTGCCAGCACAGGCTTTTTTATTGGAGAAC
 CACAAGACTTTGGCGTGAAGACCAGGCAGACCTTATTTGGTGTGAGCTTACTCTCTGTCTCCTGTAT
 TTTGACCAAGTCCCTGAAAAATTTGCTAGCTTTTCAAGTTTGGACCCCAAGCTGACAATGTTCTGAAGTGC
 CTTTATAGGCCTGTTCCCATTTGTTTACCTGCACGGCATTCAAGTGGTCAATTTGCACTCTTTGGCTGG
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 GTCAGCACTGGCATTTTGGTACCATGCTGGGTACATCACAGTTCTGGCCTTCATTTGCTTTGATTTGCA
 TTCAAGGGGAGGAAACTTCTGAGAATTACAACGAAGCCAAGTTCTGACCTTTGGGATGCTGATTTACT
 TCATAGCTTGGATCACATTCATCCCTGTCTATACTACCACATTCGCAAGTATTTGCCCGCGTGGAGAT
 TATAGTCATTCTGATATCCAATTATGGATTCTCTGCTGTATATTCTTCCCAAGTGTACATTATTCTT
 TGCAAGCAGAAGACTAACACCAATCAGCCTTCTCCAGATGGTTTACAACACTCTGCTCACAGTGTGG
 ACAGCCTTGCTTGTGATCATGTTTCCCTGGACTCCACCAGCTACGATACTGCAACAACCAATCAGAGCCC
 TGGTAACAAGATGACAGCCTGTGACAACGACAACCATCTTCTGCACAAGTGTCCACACACAGGCACG
 GCAAAGACTATCAAAGCGTCTAAAACCTTTCGCTCAGAAAAGAAGTTCAAGTATA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226201 representing NM_153071
Red=Cloning site Green=Tags(s)

MALLITVVTCFMIILDTSQSCHTPDDFVAITSPGHIMIGGLFAIHEKMLSDDHPRRPQIQKAGFEISV
 FLQTLAMIHSIEMINNSTLLSGVKLGYEYDTCTEVTAAMAATLRFLSKFNCSRETVVFQCDYSSYMPRV
 KAVIGAGYSETSIAVSRMLNLQLMPQVSYESTAEILSDKIRFPSFLRTVP SDFYQTKAMAHLIRQSGWNW
 IGAITTDDDDYGRALNTFAIQA AENNVCI AFKEVLP AFLSDNTIEVRINQTL EKII AEAQVNVIVVFLRK
 FHFVNLFTKAIERKISKIWIASDNWSTATKIITIPNVKKGKVVGF AFRGNTSSFHSFLQTLHMYPNNDN
 NKPLHEFAMLVSACKYIKDGDLSQCISNYSQATLTYDTTKTIENHLFKRNDFLWHYTEPGLIYSIQLAVF
 ALGHAIRDLCQARDCKKPNAFQPWELLAVLKNVTFDGRNSFHFDAGDLN TG YD VV L W K E T N G L M T V T K
 MAEYDLQRDVFITTNQETKHEFRKQILSKSKECSPGQMKKATGSQHS CCYECVSCPENHYSNETDMD
 HCLLCNNETHWAPVRSTTCFEKEVEYLDWDDSLALLLIALSLLGIAFVLAIGIIFTRNLKTPVVKSSGGL
 VVCYVMLICHALNFAS T G F F I G E P Q D F A C K T R Q T L F G V S F T L C V S C I L T K S L K I L L A F S F D P K L T M F L K C
 LYRPVPIVLTCTGIQVICTLWLVAAPSVEENISLPRVILECEEGSALAFG T M L G Y I T V L A F I C F V F A
 FKGRKLPENYEA K F L T F G M L I Y F I A W I T F I P V Y T T T F G K Y L P A V E I I V I L I S N Y G I L C C I F F P K C Y I I L
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 AKTIKASKTLRQKRSSSI

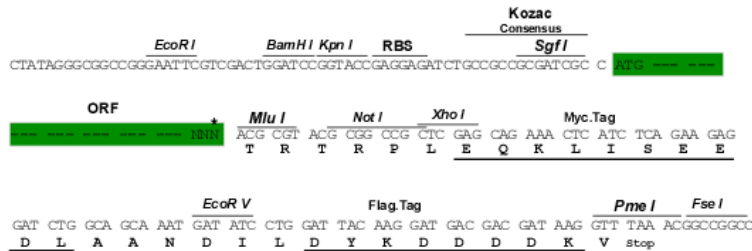
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1600_f11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_153071

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 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_153071.1](#), [NP_694711.1](#)

RefSeq Size: 2856 bp

RefSeq ORF: 2787 bp

Locus ID: 210198

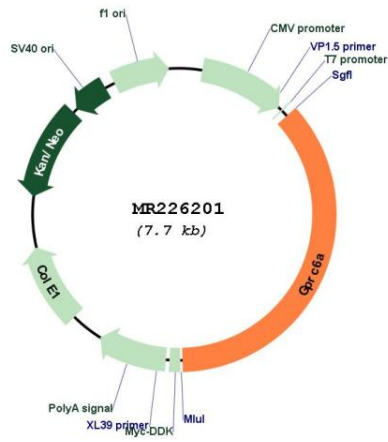
UniProt ID: [Q8K4Z6](#)

Cytogenetics: 10 B3

MW: 104.7 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 respond 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.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226201