

## Product datasheet for RC223106

### GMPR2 (NM\_001002002) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GMPR2 (NM_001002002) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GMPR2
Synonyms:	GMPR 2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223106 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCTCATATTGACAACGATGTGAACTGGACTTCAAGGATGTCCTTTTGAGGCCCAAACGCAGTACCC  
TTAAGTCTCGAAGTGAGGTGGATCTCACAAGATCCTTTTCATTTTCGAACTCAAAGCAGACATACTCTGG  
GGTTCCCATCATTGCTGCCAATATGGATACTGTGGCACCTTTGAGATGGCCAAGTTCTCTGTAAGTTC  
TCTCTTCACTGCTGTCCATAAGCACTATAGCCTCGTTCAGTGGCAAGAGTTTGTGGCCAGAATCCTG  
ACTGTCTTGAGCATCTGGCTGCCAGCTCAGGCACAGGCTCTTCTGACTTTGAGCAGCTGGAACAGATCCT  
GGAAGCTATCCCGAGTGAAGTATATATGCCTGGATGTGGCAAATGGCTACTCTGAACACTTTGTGAA  
TTTGTAAGATGTACGGAAGCGCTTCCCCAGCACACCATCATGGCAGGGAATGTGGTAACAGGAGAGA  
TGGTAGAAGAGCTCATCCTTTCTGGGGTACATCATCAAAGTGGGAATTTGGGCCAGGCTCTGTGTGAC  
TACTCGGAAGAAAAGTGGAGTGGGGTATCCACAGCTCAGCGCAGTGATGGAGTGTGCAGATGCTGCTCAT  
GGCCTCAAAGGCCACATCATTTCAGATGGAGGTTGCAGCTGTCTGGGGATGTGGCCAAGGCTTTTGGGG  
CAGGAGCTGACTTCGTGATGCTGGGTGGCATGCTGGCTGGGCACAGTGAGTCAGTGGTGGAGCTCATCGA  
GAGGGATGGCAAGAAGTACAAGCTTTCTATGGAATGAGTTCTGAAATGGCCATGAAGAAGTATGCTGGG  
GGCGTGGCTGAGTACAGAGCCTCAGAGGAAAGACAGTGAAGTTCCTTTTAAAGGAGATGTGGAACATA  
CCATCCGAGACATCCTAGGAGGATCCGCTCTACGTGTACCTATGTGGGAGCAGCTAAGCTCAAAGAGTT  
GAGCAGGAGAAGTACCTTCATCCGAGTACCCAGCAGGTGAATCCAATCTTCAGTGGGCGTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC223106 protein sequence  
Red=Cloning site Green=Tags(s)

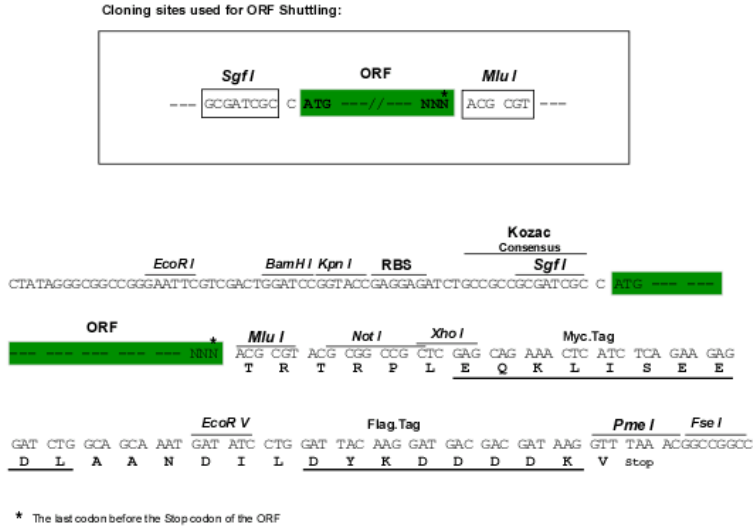
MPHIDNDVKLDFKDVLLRPKRSTLKSRSSEVDL TRSF SFRNSKQTYSGVPIIAANMDTVGTFEMAKVLCFK  
 SLFTA VHKHYSLVQWQEFAGQNPDCLEHLAASSGTGSSDFEQLEQILEAIPQVKYICLDVANGYSEHFVE  
 FVKDVRKRFPQHTIMAGNVVTGEMVEELILSGADIKVGIGPGSVCTTRKKTGVGYPQLSAVMCADAHAH  
 GLKGHII SDGGCSCP GDVAKAFGAGADFVMLGGMLAGHSESGGELIERDGKKYKLFYGMSEMAMKKYAG  
 GVAEYRASEGKTVEVPFKGDVEHTIRDILGGIRSTCTYVGA AKL KELSRRTT FIRVTQVNP I FSEAC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6424\\_c02.zip](https://cdn.origene.com/chromatograms/mk6424_c02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001002002

**ORF Size:** 1044 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.

**RefSeq:** [NM\\_001002002.3](#)

**RefSeq Size:** 1669 bp

**RefSeq ORF:** 1047 bp

**Locus ID:** 51292

**UniProt ID:** [Q9P2T1](#)

**Cytogenetics:** 14q12

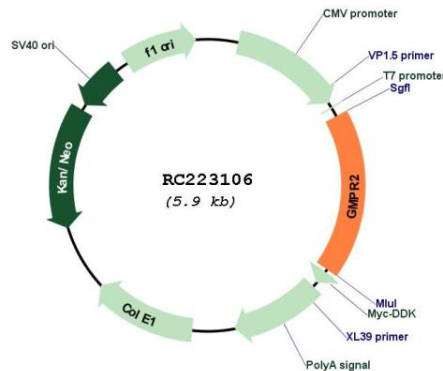
**Protein Families:** Druggable Genome

**Protein Pathways:** Purine metabolism

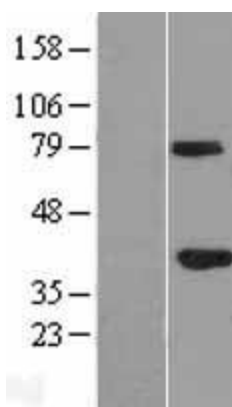
**MW:** 37.9 kDa

**Gene Summary:** This gene encodes an enzyme that catalyzes the irreversible and NADPH-dependent reductive deamination of guanosine monophosphate (GMP) to inosine monophosphate (IMP). The protein also functions in the re-utilization of free intracellular bases and purine nucleosides. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2017]

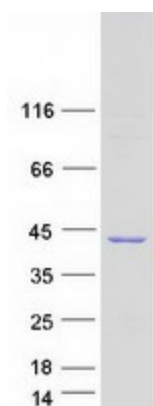
**Product images:**



Circular map for RC223106



Western blot validation of overexpression lysate (Cat# [LY424316]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223106 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GMPR2 protein (Cat# [TP323106]). The protein was produced from HEK293T cells transfected with GMPR2 cDNA clone (Cat# RC223106) using MegaTran 2.0 (Cat# [TT210002]).