

Product datasheet for RC203418

GMPR2 (NM_001002000) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GMPR2 (NM_001002000) 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:	>RC203418 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTCATATTGACAACGATGTGAACTGGACTTCAAGGATGTCCTTTTGAGGCCCAAACGCAGTACCC
TTAAGTCTCGAAGTGAGGTGGATCTCACAAGATCCTTTTCATTTTCGAACTCAAAGCAGACATACTCTGG
GGTCCCATTGCTGCCAATATGGATACTGTGGCACCTTTGAGATGGCCAAGTTCTCTGTAAGTTC
TCTCTTCACTGCTGTCCATAAGCACTATAGCCTCGTTCAGTGGCAAGAGTTTGTGGCCAGAATCCTG
ACTGTCTTGAGCATCTGGCTGCCAGCTCAGGCACAGGCTCTTCTGACTTTGAGCAGCTGGAACAGATCCT
GGAAGCTATCCCGAGTGAAGTATATATGCCTGGATGTGGCAAATGGCTACTCTGAACACTTTGTGAA
TTTGTAAGATGTACGGAAGCGCTTCCCCAGCACACCATCATGGCAGGGAATGTGGTAACAGGAGAGA
TGGTAGAAGAGCTCATCCTTTCTGGGGTACATCATCAAAGTGGGAATTTGGCCAGGCTCTGTGTGAC
TACTCGGAAGAAAAGTGGAGTGGGGTATCCACAGCTCAGCGCAGTGATGGAGTGTGCAGATGCTGCTCAT
GGCCTCAAAGGCCACATCATTTCAGATGGAGTTGCAGCTGTCTGGGGATGTGGCCAAGGCTTTTGGGG
CAGGAGCTGACTTCGTGATGCTGGGTGGCATGCTGGCTGGGCACAGTGAGTCAGTGGTGGTGCATCGA
GAGGGATGGCAAGAAGTACAAGCTTTCTATGGAATGAGTTCTGAAATGGCCATGAAGAAGTATGCTGGG
GGCGTGGCTGAGTACAGAGCCTCAGAGGAAAGACAGTGAAGTTCCTTTTAAAGGAGATGTGGAACATA
CCATCCGAGACATCCTAGGAGGGATCCGCTCTACGTGTACCTATGTGGGAGCAGCTAAGCTCAAAGAGTT
GAGCAGGAGAAGTACCTTCATCCGAGTACCCAGCAGGTGAATCCAATCTTCAGTGGGCGTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203418 protein sequence
Red=Cloning site Green=Tags(s)

MPHIDNDVKLDFKDVLLRPKRSTLKSRSSEVDL TRSF SFRNSKQTYSGVPIIAANMDTVGTFEMAKVLCFKF
 SLFTA VHKHYSLVQWQEFAGQNPDCLEHLAASSGTGSSDFEQLEQILEAIPQVKYICLDVANGYSEHFVE
 FVKDVRKRFPQHTIMAGNVVTGEMVEELILSGADIKVGIGPGSVCTTRKKTGVGYPQLSAVMCADAHAH
 GLKGHIISDGGCSCP GDVAKAFGAGADFVMLGGMLAGHSESGGELIERDGKKYKLFYGMSEMAMKKYAG
 GVAEYRASEGKTVEVPFKGDVEHTIRDILGGIRSTCTYVGA AKL KELSRRTTFIRVTQVNPFI SEAC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6424_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001002000

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_001002000.3](#)

RefSeq Size: 1989 bp

RefSeq ORF: 1047 bp

Locus ID: 51292

UniProt ID: [Q9P2T1](#)

Cytogenetics: 14q12

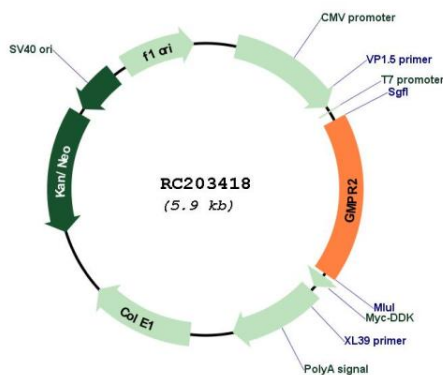
Protein Families: Druggable Genome

Protein Pathways: Purine metabolism

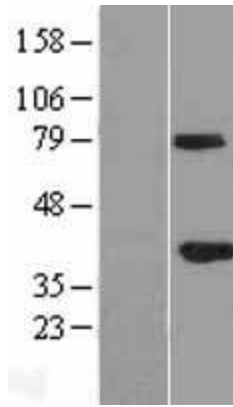
MW: 37.9 kDa

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]

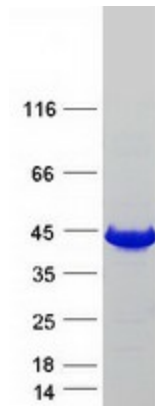
Product images:



Circular map for RC203418



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# [TP303418]). The protein was produced from HEK293T cells transfected with GMPR2 cDNA clone (Cat# RC203418) using MegaTran 2.0 (Cat# [TT210002]).