

Protein Sequence: >RC203584 protein sequence
Red=Cloning site Green=Tags(s)

MTSCLPALRFIATPRLSAMPHIDNDVKLDFKDVLLRPKRSTLKSRSSEVDLTRSFSFRNSKQTYSGVPIIA
 ANMDTVGTFEMAKVLCFSLFTAVHKHYSLVQWQEFAGQNPDCLEHLAASSGTGSSDFEQLEQILEAIPQ
 VKYICLDVANGYSEHFVEFVKDVRKRFQHTIMAGNVVTGEMVEELILSGADIKVGIGPGSVCTTRKKT
 GVGYPQLSAVMECADAAHGLKGHIISDGGCSCP GDVAKAFGAGADFVMLGGMLAGHSESGGELIERDGKK
 YKLFYGMSSSEMAMKKYAGGVAEYRASEGKTVEVPFKGDVEHTIRDILGGIRSTCTYVGAAKLKELSRRTT
 FIRVTQQVNPIFSEAC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6413_h10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_016576

ORF Size: 1098 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_016576.5](#)

RefSeq Size: 1910 bp

RefSeq ORF: 1101 bp

Locus ID: 51292

UniProt ID: [Q9P2T1](#)

Cytogenetics: 14q12

Domains: IMPDH

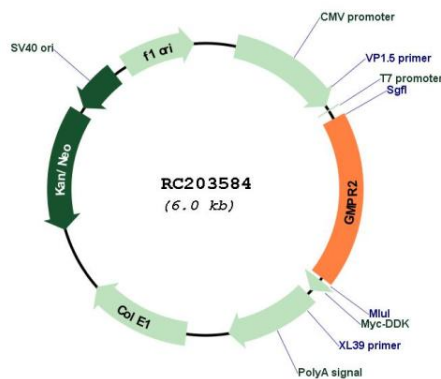
Protein Families: Druggable Genome

Protein Pathways: Purine metabolism

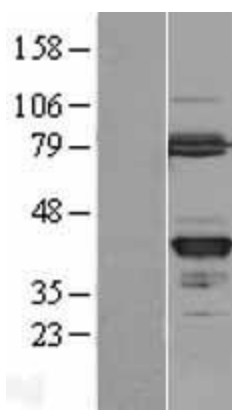
MW: 39.8 kDa

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]

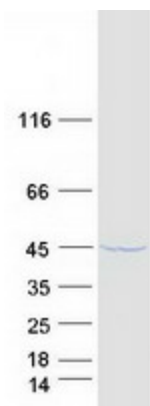
Product images:



Circular map for RC203584



Western blot validation of overexpression lysate (Cat# [LY413898]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203584 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GMPR2 protein (Cat# [TP303584]). The protein was produced from HEK293T cells transfected with GMPR2 cDNA clone (Cat# RC203584) using MegaTran 2.0 (Cat# [TT210002]).