

Product datasheet for **RC200186**

GMPPB (NM_021971) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GMPPB (NM_021971) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GMPPB
Synonyms: LGMDR19; MDDGA14; MDDGB14; MDDGC14
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC200186 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGCACTGATCTTAGTGGGGGCTATGGGACGGGCTACGGCCGCTGACGCTGAGCACCCGAAGC
CACTGGTGGACTTCTGCAATAAGCCCATCTTGTGCACCAAGTGGAGGCGCTAGCCGCGGAGGCGTGGA
CCACGTGATCCTGGCCGTGAGCTACATGTCGAGGTGCTGGAGAAGGAAATGAAGGCACAGGAGCAGAGG
CTGGGAATCCGAATCTCCATGTCCCATGAAGAGGAGCCTTTGGGACAGCTGGGCCCTGGCGCTGGCC
GTGACCTACTCTGAGACTGCAGACCCTTCTCGTCCTCAACAGTGACGTGATCTGCGATTTCCCTT
CCAAGCCATGGTGCAGTTCACCGGCACCATGGCCAGGAGGGCTCCATCCTGGTGACCAAGTGGAGGAA
CCCTCCAAGTACGGTGTGGTGTGTGAGGCTGACACAGGCCGATTACCGGTTCTGGAGAAGCCAC
AGGTGTTTGTGTCCAATAAGATCAACGCAGGCATGTACATCCTGAGCCCTGCAGTGTGCGGCGCATCCA
GCTGCAGCCTACGTCCATTGAGAAGGAGGTCTTCCCCATTATGGCCAAGGAGGGGAGCTATATGCCATG
GAGTTACAGGGCTTCTGGATGGACATTGGGACGCCAAGGACTTCTCACTGGCATGTGCCTTCTCTGC
AGTCACTGAGGCAGAAGCAGCCTGAGCGGCTGTGCTCAGGCCCTGGCATTGTGGCAACGTGCTGGTGG
CCAAGTGCCCGCATCGGCCAGAACTGCAGCATTGGCCCAATGTGAGCCTGGGACCTGGCGTGGTGGT
GAAGATGGTGTGTATCCGGCGGTGCACGGTGTGCGGGATGCCGGATCCGTTCCCATCTCTGGCTTG
AGTCTGCATTGTGGCTGGCGCTGCCGCGTGGTGCAGTGGGTACGCATGGAGAACGTGACAGTGCCTGG
TGAGGACGTCATAGTTAATGATGAGCTCTACCTCAACGGAGCCAGCGTGTGCCCAACAAGTCTATTGG
GAGTCAGTGCCAGAGCCTCGTATCATCATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



[View online »](#)

Protein Sequence: >RC200186 protein sequence
Red=Cloning site Green=Tags(s)

MKALILVGGYGTRLRPLTLSTPKPLVDFCNKPILLHQVEALAAAGVDHVILAVSYMSQVLEKEMKAQEQR
 LGIRISMSHEEPLGTAGPLALARDLLSETADPFFVLNSDVICDFPFQAMVQFHRHHGQEGSILVTKVEE
 PSKYGVVCEADTGRIHRFVEKPQVFVSNKINAGMYILSPAFLRRIQLQPTSIEKEVFPIMAKEGQLYAM
 ELQGFWMDIGQPKDFLTGMCLFLQSLRQKQPERLCSGPGIVGNLVDPSARIGQNCISIGPNVSLGPGVVV
 EDGVCIRRCTVLRDARIRSHSWLESCIVGWRCRVGQWVRMENVTLGEDVIVNDELYLNGASVLPKHSIG
 ESVPEPRIM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6080_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_021971

ORF Size: 1080 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_021971.2](#)

RefSeq Size: 1607 bp

RefSeq ORF: 1083 bp

Locus ID: 29925

UniProt ID: [Q9Y5P6](#)

Cytogenetics: 3p21.31

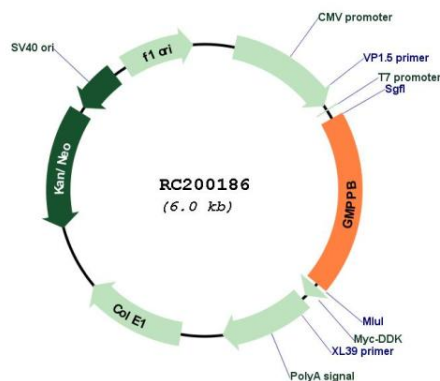
Domains: hexapep, NTP_transferase

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways

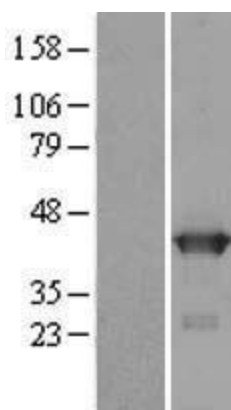
MW: 39.9 kDa

Gene Summary: This gene is thought to encode a GDP-mannose pyrophosphorylase. The encoded protein catalyzes the conversion of mannose-1-phosphate and GTP to GDP-mannose, a reaction involved in the production of N-linked oligosaccharides. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jan 2009]

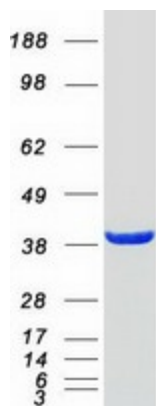
Product images:



Circular map for RC200186



Western blot validation of overexpression lysate (Cat# [LY415640]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC219720] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GMPPB protein (Cat# [TP300186]). The protein was produced from HEK293T cells transfected with GMPPB cDNA clone (Cat# RC200186) using MegaTran 2.0 (Cat# [TT210002]).