

Product datasheet for **RC204763**

GNPDA1 (NM_005471) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNPDA1 (NM_005471) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNPDA1
Synonyms:	GNP1; GNPDA; GNPI; GPI; HLN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204763 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCTCATCATCCTGGAGCACTATTCTCAGGCGAGCGAGTGGGCGGCTAAATACATCAGGAACCGCA
TCATCCAGTTTAACCCAGGGCCAGAGAAGTACTTCACCCTGGGGCTCCCCACTGGGAGTACCCCACTTGG
CTGCTACAAGAAGCTGATTGAATACTATAAGAATGGGGACCTGTCCTTTAAATATGTGAAGACCTTCAAC
ATGGATGAGTACGTGGCCTTCTCGAGACCACCCGAGAGTTACCACTCCTTCATGTGGAACAACCTTCT
TCAAGCACATTGACATCCACCCAGAAAACACCCACATTCTGGATGGGAATGCAGTCGACCTACAGGCAGA
ATGTGATGCCTTTGAAGAGAAGATCAAGGCTGCAGGTGGGATCGAGCTATTTGTTGGAGGCATCGGCCCT
GATGGACACATTGCCTTCAACGAGCCAGGCTCCAGTCTGGTGTCCAGGACCCGTGTGAAGACGCTGGCCA
TGGATACCATCCTGGCCAATGCTAGGTTCTTCGATGGAGAACTCACCAAGGTGCCACCATGGCCTTGAC
GGTGGGGGTGGGCACTGTGATGGATGCTAGAGAGGTGATGATCCTTATCACAGGTGCTCACAAAGGCATTT
GCTCTGTACAAGGCCATCGAGGAGGGAGTGAACCACATGTGGACCGTGTCTGCCTCCAGCAGCATCCCC
GCACCGTGTGTTGTGTGACGAGGATGCCACCTTGGAGCTGAAAGTGAAGACTGTCAAGTATTTCAAAGG
TTAATGCTTGTTCATAACAAGTTGGTGGACCCCTGTACAGTATCAAAGAGAAAAGAACTGAGAAAAGC
CAATCTTGAAGAAACCATACAGCGAT

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204763 protein sequence
Red=Cloning site Green=Tags(s)

MKLIILEHYSQASEWAAKYIRNRIIQFNPGPEKYFTLGLPTGSTPLGCKYKLIIEYYKNGDLSFKYVKTFN
MDEYVGLPRDHPESYHSFMWNNFFKHIDHPENTHILDGNAVDLQAECDAFEKIKAAAGGIELFVGGIGP
DGHIAFNEPGSSLSRTRVKTLMAMDTILANARFFDDELTKVPTMALTVGVGTVMMDAREVMILITGAHKAF
ALYKAIIEEGVNHMWTVSFAFQQHPRTVFVCEDEATLELKVTKVYFKGLMLVHNKLVDP LYSIKEKETEKES
QSSKKPYSD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6426_h11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005471

ORF Size: 867 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_005471.5](#)

RefSeq Size: 2311 bp

RefSeq ORF: 870 bp

Locus ID: 10007

UniProt ID: [P46926](#)

Cytogenetics: 5q31.3

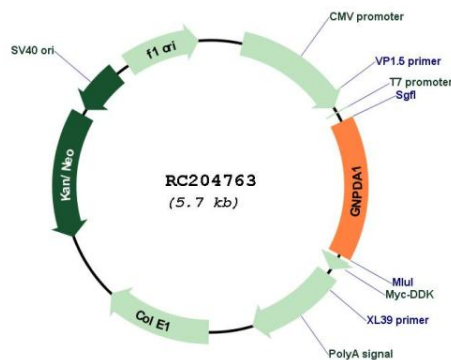
Domains: Glucosamine_iso

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

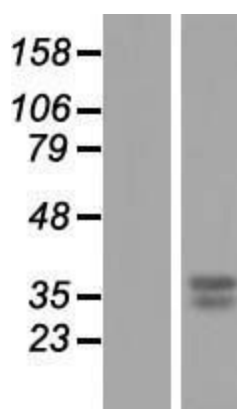
MW: 32.7 kDa

Gene Summary: Glucosamine-6-phosphate deaminase (EC 3.5.99.6) is an allosteric enzyme that catalyzes the reversible conversion of D-glucosamine-6-phosphate into D-fructose-6-phosphate and ammonium (Arreola et al., 2003 [PubMed 12965206]).[supplied by OMIM, Jan 2010]

Product images:



Circular map for RC204763



Western blot validation of overexpression lysate (Cat# [LY417282]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204763 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).