

Product datasheet for **RC232257**

GNPDA2 (NM_001270880) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GNPDA2 (NM_001270880) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GNPDA2
Synonyms: GNP2; SB52
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC232257 representing NM_001270880
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAGGCTTGTAATTCTTGATAACTATGACTTGGCTAGTGAATGGGCAGCCAAATACATCTGTAATCGCA
TCATTAGTTCAAACCTGGACAGGACAGATATTTTACTGGTTTACCAACAGGACTTCCAAGAAATCA
TCCTGAAAGCTACCATTCTTATATGTGGAATAATTTTTTAAGCATATCGATATAGATCCTAATAATGCA
CATATCCTTGACGGGAATGCTGCAGATTTACAAGCAGAAATGTGATGCTTTTGAAAACAAAATAAAAGAAG
CTGGAGGAATAGATCTTTTTGTTGGAGGAATTGGTCCAGATGGTCATATCGCTTTCAATGAGCCTGGATC
CAGTTTAGTGTCAAGGACAAGATTAAGACTCTAGCAATGGATACCATCTTGGCAAATGCCAAATATTTT
GATGGAGATTTATCAAAGTGCCAACCTATGGCTCTAAGTGTGGTGTGGGGACAGTGTGGATGCTAGAG
AAGTAATGATCCTTATAACAGGGGCACACAAGGCATTTGCCCTGTACAAAGCAATAGAAGAAGGAGTCAA
TCACATGTGGACTGTTTCCGCTTCCAGCAGCATCCCCGACTATTTTGTATGCGATGAAGATGCTACT
TTAGAATTAAGAGTTAAAACGTGAAATACTTTAAAGGTCTAATGCATGTGCACAATAAACTTGTGGATC
CACTATTCAGTATGAAAGATGAAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC232257 representing NM_001270880
 Red=Cloning site Green=Tags(s)

MRLVILDNYDLASEWAAKYICNRIIQFKPGQDRYFTLGLPTGLPRNHPEYSYHSMWNFFKHIDIDPNNA
 HILDGNAADLQAECDAFENKIKEAGGIDLVGGIGPDGHIAFNEPGSSLVSRTRLKTLAMDTILANAKYF
 DGDLSKVPTMALTVGGTVMDAREVMILITGAHKAFALYKAIIEGVNHHMWTVSFAFQQHPRTIFVCDDEAT
 LELRVKTVKYFKGLMHVHNKLVDPFLFSMKDGN

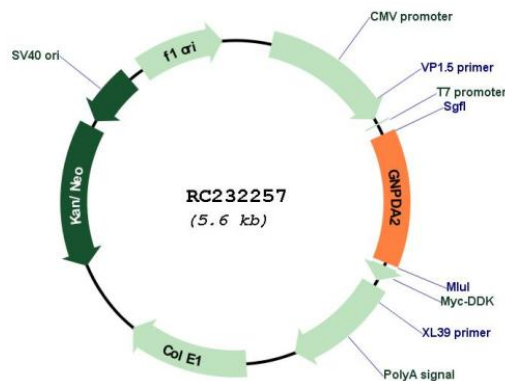
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001270880
 ORF Size: 726 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:	<ol style="list-style-type: none">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_001270880.1 , NP_001257809.1
RefSeq Size:	2211 bp
RefSeq ORF:	729 bp
Locus ID:	132789
UniProt ID:	Q8TDQ7
Cytogenetics:	4p12
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Metabolic pathways
MW:	27.5 kDa
Gene Summary:	The protein encoded by this gene is an allosteric enzyme that catalyzes the reversible reaction converting D-glucosamine-6-phosphate into D-fructose-6-phosphate and ammonium. Variations of this gene have been reported to be associated with influencing body mass index and susceptibility to obesity. A pseudogene of this gene is located on chromosome 9. Alternative splicing results in multiple transcript variants that encode different protein isoforms. [provided by RefSeq, Aug 2012]