

Product datasheet for **RC208376**

UGP2 (NM_006759) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UGP2 (NM_006759) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UGP2
Synonyms:	DEE83; EIEE83; pH379; SVUGP2; UDPG; UDPGP; UDPGP2; UGP1; UGPP1; UGPP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208376 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGCAGATTTGTACAAGATCTTAGCAAAGCAATGTCTCAAGATGGTGTCTCTCAGTTCGAAGAAGTCA
 TTCGGCAAGAGCTAGAATTATCTGTGAAGAAGGAACTAGAAAAATACTACCACAGCATCATCACATGA
 ATTTGAGCACACCAAAAAAGACCTGGATGGATTCGGAAGCTATTTTCATAGATTTTTGCAAGAAAAGGGG
 CCTTCTGTGGATTGGGAAAAATCCAGAGACCCCTGAAGATTCGATTCAACCCTATGAAAAGATAAAGG
 CCAGGGGCTTGCCTGATAATATATCTTCCGTGTTGAACAACTAGTGGTGGTGAACCTCAATGGTGGTTT
 GGGAACACAGCATGGGCTGCAAAGGCCCTAAAAGTCTGATTGGTGTGAGGAATGAGAATACCTTTCTGGAT
 CTGACTGTTCCAGCAAATGAACATTTGAATAAACCTACAATACAGATGTTCTCTTGTTTAATGAACT
 CTTTTAACACGGATGAAGATACCAAAAAATACTACAGAAGTACAATCATTGTCGTGTGAAAATCTACAC
 TTTCAATCAAAGCAGGTACCCGAGGATTAATAAGAATCTTACTTCTGTAGCAAAGGACGTGTCTTAC
 TCAGGGGAAAATACAGAAGCTTGGTACCCTCCAGGTCATGGTATTTACGCCAGTTTCTACAACCTCTG
 GATTGCTTGATACCTTTATAGGAGAAGGCAAAGAGTATATTTTTGTGTCTAACATAGATAATCTGGGTGC
 CACAGTGGATCTGTATATTTCTAATCATCTAATGAACCCACCAATGGAAAACGCTGTGAATTTGTCATG
 GAAGTCACAAATAAACACGTGCAGATGTAAAGGGCGGGACACTCAATATGAAGGCAAACCTGAGAC
 TGGTGGAAATTGCTCAAGTGCCAAAAGCACATGTAGACGAGTTCAAGTCTGTATCAAAGTTCAAATATT
 TAATACAAACAACCTATGGATTTCTCTTGCAGCAGTTAAAAGACTGCAGGAGCAAATGCCATTGACATG
 GAAATCATTGTGAATGCAAAGACTTTGGATGGAGGCCGTAATGTCATTCAATTAGAAAATGCAGTAGGGG
 CTGCCATCAAAAGTTTTGAGAATCTCTAGGTATTAATGTGCCAAGGAGCCGTTTTCTGCCTGTCAAAA
 CACATCAGATCTCTTGGTGTGTCAAACCTCTATAGTCTTAATGCAGGATCTCTGACAATGAGTGAA
 AAGCGGGAATTTCTACAGTGCCCTTGGTTAAATTAGGCAGTTCTTTTACGAAGTTCAAGATTATCTAA
 GAAGATTTGAAAGTATACCAGATATGCTTGAATGGATCACCTCACAGTTTCAGGAGATGTGACATTTGG
 AAAAAATGTTTCATTAAGGGAACGGTTATCATCATTGCAAATCATGGTGACAGAATTGATATCCCACCT
 GGAGCAGTATTAGAGAACAAGATTGTGTCTGGAAACCTTCGCATCTTGGACCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208376 protein sequence
 Red=Cloning site Green=Tags(s)

MSRFVQDL SKAMSQDGASQFQEVIRQLELELVKKELEKILTTASSHEFEHTKKDLDFGRKLFHRFLQKEG
 PSVDWGIQRPPEDSIQPYEKIKARGLPDNISSVLNKL VVVKLNGLGTSMGCKGPKSLIGVRNENTFLD
 LTVQQIEHLNKTNTDVLVLMNSFNDEDTKKILQKYNHCRVKIYTFNQSRYPRIKESLLPVAKDVS
 YSGENTEAWYPPGHGDIYASFYNSGLLDTF IGEGKEYIFVSNIDNLGATVDLYILNHLMPNPPNGKRCFV
 M EVTNKTRADVKGGLTQYEGKLRLEVEIAQVPAHVDFKSVSKFKIFNTNWLWISLAAVKRLQEQAIDM
 EIIVNAKTLDGGLNVIQLETAVGAAIKSFENSLGINVPRSRFLPVKTTSDLLL VMSNLYSLNAGSLTMSE
 KREFPTVPLVKLGSSFTKVQDYLRREFSIPDMLDLH TVSGDVTFGKNVSLKGTVIIIANHGDRIDIPP
 GAVLENKIVSGNLRILDH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6528_e02.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_006759

ORF Size: 1524 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_006759.4](#)

RefSeq Size: 2185 bp

RefSeq ORF: 1527 bp

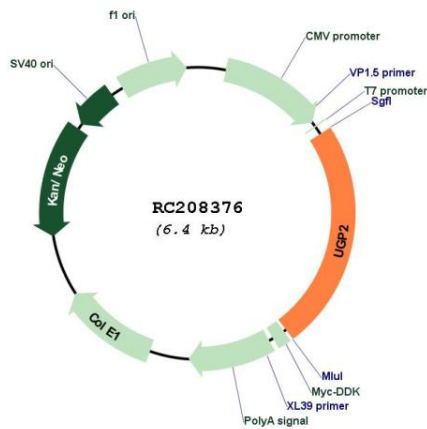
Locus ID: 7360

UniProt ID: [Q16851](#)

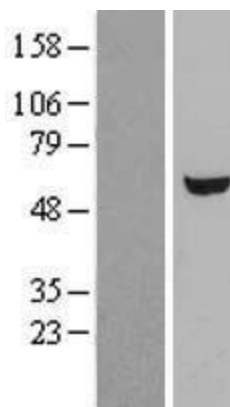
Cytogenetics: 2p15

Domains:	UDPGP
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways, Pentose and glucuronate interconversions, Starch and sucrose metabolism
MW:	56.9 kDa
Gene Summary:	The enzyme encoded by this gene is an important intermediary in mammalian carbohydrate interconversions. It transfers a glucose moiety from glucose-1-phosphate to MgUTP and forms UDP-glucose and MgPPi. In liver and muscle tissue, UDP-glucose is a direct precursor of glycogen; in lactating mammary gland it is converted to UDP-galactose which is then converted to lactose. The eukaryotic enzyme has no significant sequence similarity to the prokaryotic enzyme. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

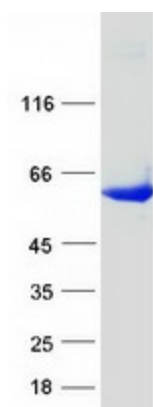
Product images:



Circular map for RC208376



Western blot validation of overexpression lysate (Cat# [LY416438]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208376 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UGP2 protein (Cat# [TP308376]). The protein was produced from HEK293T cells transfected with UGP2 cDNA clone (Cat# RC208376) using MegaTran 2.0 (Cat# [TT210002]).