

## Product datasheet for RC229996

### UDP glucose dehydrogenase (UGDH) (NM\_001184701) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	UDP glucose dehydrogenase (UGDH) (NM_001184701) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UGDH
Synonyms:	DEE84; EIEE84; GDH; UDP-GlcDH; UDPGDH; UGD
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC229996 representing NM_001184701 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGGGAAAGGCCGGCAGCAGATCTGAAGTATATTGAAGCTTGTGCTAGACGCATTGTGCAAACTCAA  
ATGGGTACAAAATTGTGACTGAGAAAAGCACAGTTCAGTGCGGGCAGCAGAAAGTATCCGTCGCATATT  
TGATGCAAAACACAAAACCAACTTGAATTTACAGGTGCTGTCCAACCCTGAGTTTCTGGCAGAGGGAACA  
GCCATCAAGGACCTAAAGAACCCAGACAGAGTACTGATTGGAGGGGATGAACTCCAGAGGCCAGAGAG  
CTGTGCAGGCCCTGTGTGCTGTATATGAGCACTGGTTCCAGAGAAAAGATCCTCACCCTAATACTTG  
GTCTTCAGAGCTTCCAACTGGCAGCAAAATGCTTTTCTGCCAGAGAATAAGCAGCATTAACCCATA  
AGTGCTCTGTGTGAAGCAACAGGAGCTGATGTAGAAGAGGTAGCAACAGCGATTGGAATGGACCAGAGAA  
TTGGAACAAGTTTCTAAAAGCCAGTGTGGGTTGGTGGGAGCTGTTCCAAAAGGATGTTCTGAATTT  
GGTTTATCTCTGTGAGGCTCTGAATTTGCCAGAAGTAGCTCGTTATTGGCAGCAGGTCATAGACATGAAT  
GACTACCAGAGGAGGAGTTTGCCTCCCGATCATAGATAGTCTGTTAATACAGTAAGTATAAAGA  
TAGCTATTTGGGATTTGCATTCAAAAGGACACTGGTGATACAAGAGAATCTTAGTATATATATTAG  
CAAATATTTGATGGATGAAGGTGCACATCTACATATATATGATCCAAAAGTACCTAGGGAACAAATAGTT  
GTGGATCTTTCTCATCCAGGTGTTTCAGAGGATGACCAAGTGTCCCGGCTCGTGACCATTTCCAAGGATC  
CATATGAAGCATGTGATGGTGCCATGCTGTTGTTATTTGCAGTGAAGGACATGTTTAAAGGAATTGGA  
TTATGAACGCATTCATAAAAAATGCTAAAGCCAGCCTTTATCTTCGATGGACGGCGTGTCTGGATGGG  
CTCCACAATGAATCAAAACATTGGCTTCCAGATTGAAACAATTGGCAAAAAGGTGCTTCAAAGAGAA  
TTCCATATGCTCCTTCTGGTGAATTCGAAGTTTAGTCTTCAAGATCCACCTAACAAAGAACTAAAGT  
G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC229996 representing NM\_001184701  
 Red=Cloning site Green=Tags(s)

MGKGRAADLKYIEACARRIVQNSNGYKIVTEKSTVPVRAAESIRRIFDANTKPNLNLQVLSNPEFLAEGT  
 AIKDLKNPDRVLIGGDETPEGQRAVQALCAVYEHVVPREKILTTNTWSSEL SKLAANAFLAQRISINSI  
 SALCEATGADVEEVATAIGMDQRIGNKFLKASVFGGSCFQKQDLNLVYLCEALNLEPVARYWQQVIDMN  
 DYQRRRFASRIIDSLFNTVTDKKAAILGF AFKKTGDTRESSSIYISKYLMDEGAHLHIYDPKVPREQIV  
 VDL SHPGVSEDDQVSR LVTISKDPYEACDGAHAVVICTEWD MFKELDYER IHKMLKPAFIFDGRRVLDG  
 LHNELQTIGFQIETIGKKVSSKRIPYAPSGEIPKFSLQDPPNKKPKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

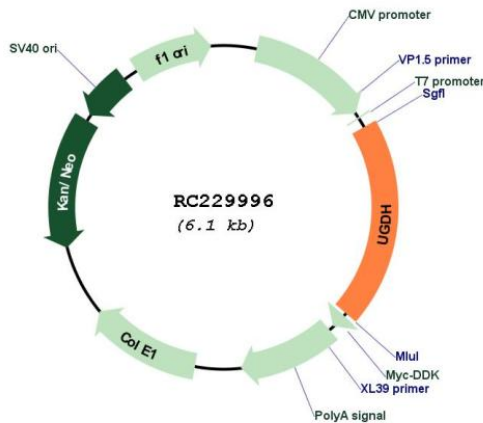
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001184701

<b>ORF Size:</b>	1191 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001184701.2</a>
<b>RefSeq Size:</b>	3026 bp
<b>RefSeq ORF:</b>	1194 bp
<b>Locus ID:</b>	7358
<b>UniProt ID:</b>	<a href="#">O60701</a>
<b>Cytogenetics:</b>	4p14
<b>Protein Pathways:</b>	Amino sugar and nucleotide sugar metabolism, Ascorbate and aldarate metabolism, Metabolic pathways, Pentose and glucuronate interconversions, Starch and sucrose metabolism
<b>MW:</b>	44.4 kDa
<b>Gene Summary:</b>	The protein encoded by this gene converts UDP-glucose to UDP-glucuronate and thereby participates in the biosynthesis of glycosaminoglycans such as hyaluronan, chondroitin sulfate, and heparan sulfate. These glycosylated compounds are common components of the extracellular matrix and likely play roles in signal transduction, cell migration, and cancer growth and metastasis. The expression of this gene is up-regulated by transforming growth factor beta and down-regulated by hypoxia. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010]