

Product datasheet for **RG229996**

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:	TurboGFP
Symbol:	UGDH
Synonyms:	DEE84; EIEE84; GDH; UDP-GlcDH; UDPGDH; UGD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG229996 representing NM_001184701 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAAAGGCCGGGCAGCAGATCTGAAGTATATTGAAGCTTGTGCTAGACGCATTGTGCAAACTCAA
ATGGGTACAAAATTGTGACTGAGAAAAGCACAGTTCAGTGCGGGCAGCAGAAAGTATCCGTCGCATATT
TGATGCAAACACAAAACCAACTGAATTTACAGGTGCTGTCCAACCCTGAGTTTCTGGCAGAGGGAACA
GCCATCAAGGACCTAAAGAACCAGACAGAGTACTGATTGGAGGGGATGAACTCCAGAGGGCCAGAGAG
CTGTGCAGGCCCTGTGTGCTGTATATGAGCACTGGTTCAGAGAAAAGATCCTCACCCTAATACTTG
GTCTTCAGAGCTTCCAACTGGCAGCAAATGCTTTTCTTGCCAGAGAATAAGCAGCATTAACTCCATA
AGTGCTCTGTGTGAAGCAACAGGAGCTGATGTAGAAGAGGTAGCAACAGCGATTGGAATGGACCAGAGAA
TTGGAAACAAGTTTCTAAAAGCCAGTGTGGGTTTGGTGGGAGCTGTTTCCAAAAGGATGTTCTGAATTT
GGTTTATCTCTGTGAGGCTCTGAATTTGCCAGAAGTAGCTCGTTATTGGCAGCAGGTCATAGACATGAAT
GACTACCAGAGGAGGAGGTTTGCCTCCCGATCATAGATAGTCTGTTTAAACAGTAACTGATAAGAAGA
TAGCTATTTTGGGATTTGCATTCAAAAGGACACTGGTGATACAAGAGAATCTTCTAGTATATATATTAG
CAAATATTTGATGGATGAAGGTGCACATCTACATATATGATCCAAAAGTACCTAGGGAACAAATAGTT
GTGGATCTTCTCATCCAGGTGTTTCAGAGGATGACCAAGTGTCCCGCTCGTGACCAATTTCCAAGGATC
CATATGAAGCATGTGATGGTCCCATGCTGTTGTTATTTGCACTGAGTGGGACATGTTAAAGGAATTGGA
TTATGAACGCATTCAAAAAAATGCTAAAGCCAGCCTTTATCTTCGATGGACGGCGTGTCTGGATGGG
CTCCACAATGAACTACAAACATTGGCTTCAGATTGAAACAATTGGCAAAAAGGTGCTTCAAAGAGAA
TTCCATATGCTCCTTCTGGTGAATTCGAAGTTAGTCTTCAAGATCCACCTAACAAAGAAACCTAAAGT
G

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG229996 representing NM_001184701
 Red=Cloning site Green=Tags(s)

MGKGRAADLKYEACARRIVQNSNGYKIVTEKSTVPVRAAESIRRIFDANTKPNLNLQVLSNPEFLAEGT
 AIKDLKNPDRVLIGGDETPEGQRAVQALCAVYEHVVPREKILTTNTWSSEL SKLAANAFLAQRISINSI
 SALCEATGADVEEVATAIGMDQRIGNKFLKASVGGSCFQKDVNLVYLCEALNLEPVARYWQQVIDMN
 DYQRRRFASRIIDSLFNTVTDKKAAILGF AFKKDTGDTRESSSIYISKYLMDEGAHLHIYDPKVPREQIV
 VDL SHPGVSEDDQVSR LVTISKDPYEACDGAHAVVICTE WDMFKELDYER IHKKMLKPAFIFDGRRLDGL
 LHNELQTIGFQIETIGKKVSSKRIPYAPSGEIPKFSLQDPPNKKPKV

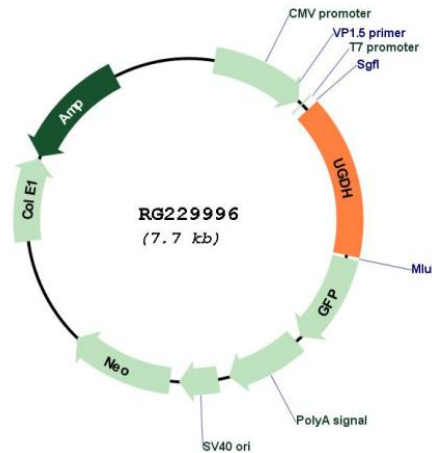
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001184701

ORF Size:	1191 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_001184701.2
RefSeq Size:	3026 bp
RefSeq ORF:	1194 bp
Locus ID:	7358
UniProt ID:	O60701
Cytogenetics:	4p14
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Ascorbate and aldarate metabolism, Metabolic pathways, Pentose and glucuronate interconversions, Starch and sucrose metabolism
Gene Summary:	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]