

Product datasheet for SC328634

OriGene Technologies, Inc.

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UDP glucose dehydrogenase (UGDH) (NM_001184701) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: UDP glucose dehydrogenase (UGDH) (NM_001184701) Human Untagged Clone

Tag: Tag Free

Symbol: UDP glucose dehydrogenase

Synonyms: DEE84; EIEE84; GDH; UDP-GlcDH; UDPGDH; UGD

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001184701, the custom clone sequence may differ by one or

more nucleotides

ATGGGGAAAGGCCGGGCAGCAGATCTGAAGTATATTGAAGCTTGTGCTAGACGCATTGTG CAAAACTCAAATGGGTACAAAATTGTGACTGAGAAAAGCACAGTTCCAGTGCGGGCAGCA GAAAGTATCCGTCGCATATTTGATGCAAACACAAAACCCAACTTGAATTTACAGGTGCTG GTACTGATTGGAGGGGATGAAACTCCAGAGGGCCAGAGAGCTGTGCAGGCCCTGTGTGCT GTATATGAGCACTGGGTTCCCAGAGAAAAGATCCTCACCACTAATACTTGGTCTTCAGAG CTTTCCAAACTGGCAGCAAATGCTTTTCTTGCCCAGAGAATAAGCAGCATTAACTCCATA AGTGCTCTGTGTGAAGCAACAGGAGCTGATGTAGAAGAGGTAGCAACAGCGATTGGAATG GACCAGAGAATTGGAAACAAGTTTCTAAAAGCCAGTGTTGGGTTTGGTGGGAGCTGTTTC CAAAAGGATGTTCTGAATTTGGTTTATCTCTGTGAGGCTCTGAATTTGCCAGAAGTAGCT CGTTATTGGCAGCAGGTCATAGACATGAATGACTACCAGAGGAGGAGGTTTGCTTCCCGG ATCATAGATAGTCTGTTTAATACAGTAACTGATAAGAAGATAGCTATTTTGGGATTTGCA ATGGATGAAGGTGCACATCTACATATATGATCCAAAAGTACCTAGGGAACAAATAGTT GTGGATCTTTCTCATCCAGGTGTTTCAGAGGATGACCAAGTGTCCCGGCTCGTGACCATT TCCAAGGATCCATATGAAGCATGTGATGGTGCCCATGCTGTTGTTATTTGCACTGAGTGG ATCTTCGATGGACGGCGTGTCCTGGATGGGCTCCACAATGAACTACAAACCATTGGCTTC CAGATTGAAACAATTGGCAAAAAGGTGTCTTCAAAGAGAATTCCATATGCTCCTTCTGGT GAAATTCCGAAGTTTAGTCTTCAAGATCCACCTAACAAGAAACCTAAAGTGTAG

Restriction Sites: Please inquire **ACCN:** NM 001184701



UDP glucose dehydrogenase (UGDH) (NM_001184701) Human Untagged Clone - SC328634

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001184701.1</u>, <u>NP 001171630.1</u>

 RefSeq Size:
 3026 bp

 RefSeq ORF:
 1194 bp

 Locus ID:
 7358

 UniProt ID:
 060701

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]

Transcript Variant: This variant (3) lacks an exon in the 5' coding region and uses a downstream start codon, compared to variant 1. Isoform 3 has a shorter N-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript

alignments.