

## Product datasheet for **RG228922**

### **DHCR7 (NM\_001163817) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	DHCR7 (NM_001163817) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DHCR7
Synonyms:	SLOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG228922 representing NM\_001163817  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCTGCAAAATCGCAACCAACATTCCAAAGCCAAGAGTCTAGATGGCGTCACCAATGACAGAACCG  
 CATCTCAAGGGCAGTGGGGCCGTGCCTGGGAGGTGGACTGGTTTTCACTGGCGAGCGTCATCTTCTACT  
 GCTGTTCCGCCCTTCATCGTCTACTACTTTCATCATGGCTTGTGACCAGTACAGCTGCGCCCTGACCGGC  
 CCTGTGGTGGACATCGTCACTGGACATGCTCGGCTCTCGGACATCTGGGCAAGACTCCACCTATAACGA  
 GGAAAGCCGCCAGCTCTATACCTTGTGGGTACCTTCCAGGTGCTTCTGTACACGTCTCTCCCTGACTT  
 CTGCCATAAGTTTCTACCCGGCTACGTAGGAGGCATCCAGGAGGGGGCCGTGACTCTGCAGGGGTGTG  
 AACAGTATCAGATCAACGGCTGCAAGCCTGGCTCCTCACGCACCTGCTCTGGTTTGCAAACGCTCATC  
 TCCTGTCTGGTCTCGCCACCATCATCTTCGACAACCTGGATCCCACTGCTGTGGTGCGCCAACATCCT  
 TGGCTATGCCGTCTCCACCTTCGCCATGGTCAAGGGCTACTTCTCCCCACCAGCGCCAGAGACTGCAAA  
 TTCACAGGCAATTTCTTTTACAACCTACATGATGGGCATCGAGTTTAAACCTCGGATCGGGAAGTGGTTTG  
 ACTTCAAGCTGTTCTTCAATGGGCGCCCGGGATCGTCGCCTGGACCCTCATCAACCTGTCTTCGCAGC  
 GAAGCAGCGGGAGCTCCACAGCCATGTGACCAATGCCATGGTCCCTGGTCAACGTCTGCAGGCCATCTAC  
 GTGATTGACTTCTTCTGGAACGAAACCTGGTACCTGAAGACCAATTGACATCTGCCATGACCACTTCGGGT  
 GGTACCTGGGCTGGGGCGACTGTGTCTGGCTGCCTTATCTTTACACGCTGCAGGGTCTGTACTTGGTGTA  
 CCACCCCGTGCAGCTGTCCACCCCGCACGCCGTGGGCGTCTGCTGCTGGGCTGGTGGGCTACTACATC  
 TTCCGGGTGGCCAACCACAGAAGGACCTGTTCCGCCGACGGATGGGCGCTGCCTCATCTGGGGCAGGA  
 AGCCCAAGTGCATCGAGTGTCTTACACATCCGCCGACGGCAGAGGCACCACAGCAAGCTGTGTGGTGC  
 GGGCTTCTGGGGCGTGGCCCGCCACTTCAACTACGTCCGGCAGCTGATGGGACGCTGGCCTACTGCCTG  
 GCCTGTGGCGGGCCACCTGCTGCCCTACTTCTACATCATCTACATGGCCATCCTGCTGACCCACCGCT  
 GCCTCCGGGACGAGCACCCTGCGCCAGCAAGTACGGCCGGGACTGGGAGCGCTACACCGCCGAGTGCC  
 TTACCGCTGCTGCCTGGAATCTTC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG228922 representing NM\_001163817  
 Red=Cloning site Green=Tags(s)

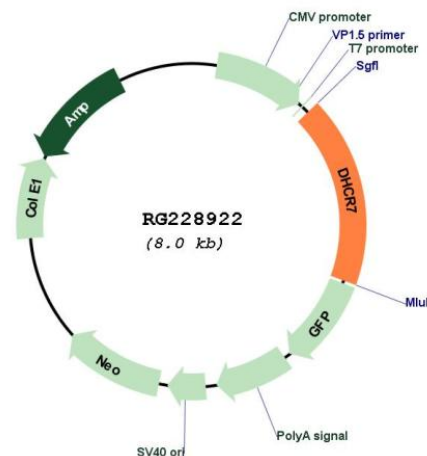
MAAKSQPNIPKAKSLDGVTNDRITASQQWGRAWEVDWFLASVIFLLLFAPFIVYYFIMACDQYSCALTG  
 PVVDIVTGHARLSDIWAKTPPIRKAALYTLWVTFQVLLYTSPLPDFCHKFLPGYVGGIIEGAVTPAGVV  
 NKYQINGLQAWLLTHLLWFANAHLISWFSPITIIIDNWIPLLWCANILGYAVSTFAMVKGYFFPTSARDCK  
 FTGNFFNYMMGIEFNPRIGKWFDFKLFNRPVGIWAATLNLISFAAKQRELHSHVTNAMVLVNVLQAIY  
 VIDFFWNETWYLKTIIDHDFGWYLGWGDVWLPYLYTLQGLYLYVYHPVQLSTPHAVGVLLLGLVGYI  
 FRVANHQDLFRRTDGRCLIWGRPKVIECSYTSADGQRHHSKLLVSGFWGVARHFNYVDLMGSLAYCL  
 ACGGGHLLPYFYIIYMAILLTHRCLRDEHRCASKYGRDWERYTAAVPYRLLPGIF

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001163817

**ORF Size:** 1425 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).

<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_001163817.1</a> , <a href="#">NP_001157289.1</a>
<b>RefSeq Size:</b>	2642 bp
<b>RefSeq ORF:</b>	1428 bp
<b>Locus ID:</b>	1717
<b>UniProt ID:</b>	<a href="#">Q9UBM7</a>
<b>Cytogenetics:</b>	11q13.4
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Metabolic pathways, Steroid biosynthesis
<b>Gene Summary:</b>	<p>This gene encodes an enzyme that removes the C(7-8) double bond in the B ring of sterols and catalyzes the conversion of 7-dehydrocholesterol to cholesterol. This gene is ubiquitously expressed and its transmembrane protein localizes to the endoplasmic reticulum membrane and nuclear outer membrane. Mutations in this gene cause Smith-Lemli-Opitz syndrome (SLOS); a syndrome that is metabolically characterized by reduced serum cholesterol levels and elevated serum 7-dehydrocholesterol levels and phenotypically characterized by cognitive disability, facial dysmorphism, syndactyly of second and third toes, and holoprosencephaly in severe cases to minimal physical abnormalities and near-normal intelligence in mild cases. Alternative splicing results in multiple transcript variants that encode the same protein.[provided by RefSeq, Aug 2009]</p>