

## Product datasheet for **RG203445**

### **PLOD3 (NM\_001084) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PLOD3 (NM_001084) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLOD3
Synonyms:	LH3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG203445 representing NM\_001084  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACCTCCTCGGGCCTGGACCCGGTTCCTGCTGCTGCTGCCGCTGCTGCTGCCCTCGCGCCTCAG  
 CCTCCGACCGGCCCGGGCCGAGACCCGGTCAACCCAGAGAAGCTGCTGGTGATCACTGTGCCACAGC  
 TGAACCGAGGGGTACCTGCGTTTCCTGCGCTCTGCGGAGTTCTTCAACTACACTGTGCGGACCCTGGC  
 CTGGGAGAGGAGTGGCGAGGGGGTGTGTGGTTCGAACAGTTGGTGGAGGACAGAAGTCCGGTGGTTAA  
 AGAAGGAAATGGAGAAATACGCTGACCGGGAGGATATGATCATCATGTTTGTGGATAGCTACGACGTGAT  
 TCTGGCCGCGAGCCACAGAGCTGCTGAAGAAGTTCGTCAGAGTGGCAGCCGCTGCTCTTCTGCA  
 GAGAGCTTCTGCTGGCCGAGTGGGGCTGGCGGAGCAGTACCCTGAGGTGGCACGGGGAAGCGCTTCC  
 TCAATTCTGGTGGATTATCGGTTTTGCCACCACCATCCACAAATCGTGCAGTGGAAAGTACAAGGA  
 TGATGACGACACCAGCTGTTCTACACACGGCTCTACCTGGACCCAGGACTGAGGGAGAAACTCAGCCTT  
 AATCTGGATCATAAGTCTCGGATCTTTCAGAACCTCAACGGGGCTTTAGATGAAGTGGTTTTAAAGTTG  
 ATCGGAACCGTGTGCGTATCCGGAACGTGGCCTACGACACGCTCCCCATTGTGGTCCATGGAACCGTCC  
 CACTAAGCTGCAGCTCAACTACCTGGGAAACTACGTCCCCAATGGCTGGACTCCTGAGGGAGGCTGTGGC  
 TTCTGCAACCAGGACCGGAGGACTCCCGGGGGGCGAGCCTCCCCCGGGTGTTCCTGGCCGTGTTTG  
 TGGAACAGCCTACTCCGTTTCTGCCCGCTTCTGCAGCGGTGCTACTCCTGGACTATCCCCCGACAG  
 GGTACCCTTTTCTGCACAACAACGAGGTCTTCATGAACCCACATCGCTGACTCCTGGCCGAGCTC  
 CAGGACCATTCTCAGCTGTGAAGCTCGTGGGGCCGAGGAGGCTCTGAGCCAGGCGAGGCCAGGGACA  
 TGCCATGGACCTGTGTGCGCAGGACCCGAGTGTGAGTTCTACTTCAGCCTGGACGCGCAGCTGTCCT  
 CACCAACCTGCAGACCTGCGTATCCTCATTGAGGAGAACAGGAAGGTGATCGCCCCATGCTGTCCCGC  
 CACGGCAAGCTGTGGTCCAATTCTGGGGCCCTGAGCCCGATGAGTACTACGCCGCTCCGAGGACT  
 ACGTGGAGCTGGTGCAGCGGAAGCGAGTGGGTGTGTGGAATGTACCATACATCTCCAGGCCTATGTGAT  
 CCGGGGTGATACCCTGCGGATGGAGCTGCCCCAGAGGGATGTGTTCTCGGGCAGTGACACAGACCCGGAC  
 ATGGCCTTCTGTAAGAGCTTTCGAGACAAGGGCATCTTCTCCATCTGAGCAATCAGCATGAATTTGGCC  
 GGCTCCTGGCCACTTCCAGATACGACACGGAGCACCTGCACCCGACCTTGGCAGATCTCGACAACCC  
 CGTCGACTGGAAGGAGCAGTACATCCACGAGAACTACAGCCGGGCCCTGGAAGGGGAAGGAATCGTGGAG  
 CAGCCATGCCCGACGTGTACTGGTCCCCTGCTGTGCAACAATGTGTGATGAGCTGGTGGCAGAGA  
 TGGAGCACTACGCCAGTGGTACGGCGGCCGATGAGGATCAAGGCTGGCTGGAGGCTACGAGAATGT  
 GCCCACCTGGACATCCACATGAAGCAGGTGGGGTACGAGGACCAGTGGCTGCAGCTGCTGCGGACGTAT  
 GTGGGCCCATGACCGAGAGCCTGTTTCCCGGTTACCACCAAGGCGCGGGCGGTGATGAACTTTGTGG  
 TTCGCTACCGCCAGACGAGCAGCCGTCTGCGGCCACACCAGACTCATCCACCTTACCCTCAACGT  
 TGCCCTCAACCACAAGGGCCTGGACTATGAGGGAGGTGGCTGCCGCTTCTGCGCTACGACTGTGTGATC  
 TCCTCCCCGAGGAAGGGCTGGGCACTCTGCACCCCGGCCCTCACCCACTACCAGGGGGCTGCCAA  
 CGACCTGGGGCACACGCTACATCATGGTGCCTTTGTCGACCCC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG203445 representing NM\_001084  
 Red=Cloning site Green=Tags(s)

```

MTSSGPGPRFLLLLPLLLPPAASASDRPRGRDPVNPEKLLVITVATAETEGYLRFLRSAEFFNYTVRTLGL
LGEWVRGGDVARTVGGGQKVRWLKKEMEKYADREDMIIMFVDSYDVILAGSPTTELLKFFVQSGSRLLFSA
ESFCWPEWGLAEQYPEVGTGKRFLNSGGF IGFATTIHQIVRQWKYKDDDDQLFYTRLYLDPGLREKLSL
NLDHKSRI FQNLNGALDEVVLKFDNRNRVIRNVAYDTLP I VVHNGNGPTKLQLNYLGNYPNGWTPEGGCG
FCNQDRRTLPGGQPPRVFLAVFVEQTPFLPRFLQRLLLLDYPPDRVTLFLHNNEVFHEPHIADSWPQL
QDHFSAVKLVGPPEEALSPGEARDMAMDLCRQDPECEFYFSLDADAVLTNLQTLRILIEENRKVIAPMLSR
HGKLSNFWGALSPDEYYARSEDYVELVQRKRVGVWNPYISQAYVIRGDTLRMELPQRDVFSGSDTDPD
MAFCKSFRDKGIFLHLSNQHEFGRLLATSRDYDEHLHPDLWQIFDNPVDWKEQYIHENYSRALEGE GIVE
QPCPDVYWFPLLSEQMCDELVAEMEHYQWSSGRHEDSRLAGGYENVPTVDIHMKQVGYEDQWLQLLR TY
VGPMTESLFPGYHTKARAVMNFVRYRPDEQPSLRPHHDSSTFTLNVALNHKGLDYEGGGCRFLRYDCVI
SSPRKGWALLHPGRLTHYHEGLPTTWGTRYIMVSFVDP
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_001084

**ORF Size:** 2214 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001084.5](#)

**RefSeq Size:** 2995 bp

**RefSeq ORF:** 2217 bp

**Locus ID:** 8985

**UniProt ID:** [O60568](#)

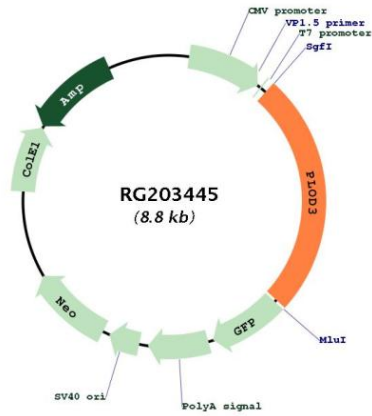
**Cytogenetics:** 7q22.1

**Domains:** 2OG-Fell\_Oxy, P4Hc

**Protein Pathways:** Lysine degradation

**Gene Summary:** The protein encoded by this gene is a membrane-bound homodimeric enzyme that is localized to the cisternae of the rough endoplasmic reticulum. The enzyme (cofactors iron and ascorbate) catalyzes the hydroxylation of lysyl residues in collagen-like peptides. The resultant hydroxylysyl groups are attachment sites for carbohydrates in collagen and thus are critical for the stability of intermolecular crosslinks. Some patients with Ehlers-Danlos syndrome type VIB have deficiencies in lysyl hydroxylase activity. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG203445