

## Product datasheet for **SC314581**

### **PLOD2 (NM\_000935) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PLOD2 (NM_000935) Human Untagged Clone
Tag:	Tag Free
Symbol:	PLOD2
Synonyms:	BRKS2; LH2; TLH
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC314581 sequence for NM\_000935 edited (data generated by NextGen Sequencing)

```

ATGGGGGGATGCACGGTGAAGCCTCAGCTGCTGCTCCTGGCGCTCGTCTCCACCCTGGAATCCCTGTC
TGGGTGCGGACTCGGAGAAGCCCTCGAGCATCCCACAGATAAATTATTAGTCATAACTGTAGCAACAAA
AGAAAGTGATGGATTCCATCGATTTATGCAGTCAGCCAAATATTTCAATTATACTGTGAAGTCCTTGGT
CAAGGAGAAGAATGGAGAGGTGGTATGGAATTAATAGTATTGGAGGGGGCCAGAAAGTGAGATTAATGA
AAGAAGTCATGGAACACTATGCTGATCAAGATGATCTGTTGTCATGTTTACTGAATGCTTTGATGTCAT
ATTTGCTGGTGGTCCAGAAGAAGTTCTAAAAAATTCAAAAGGCAAACCACAAAGTGGTCTTTGCAGCA
GATGGAATTTTGTGGCCAGATAAAAGACTAGCAGACAAGTATCCTGTTGTGCACATTGGGAAACGCTATC
TGAATTCAGGAGGATTTATTGGCTATGCTCCATATGTCAACCGTATAGTTCAACAATGGAATCTCCAGGA
TAATGATGATGATCAGCTCTTTTACACTAAAGTTTACATTGATCCACTGAAAAGGGAAGCTATTAACATC
ACATTGGATCACAAATGCAAAATTTTCCAGACCTTAAATGGAGCTGTAGATGAAGTTGTTTTAAAAATTTG
AAAATGGCAAAGCCAGAGCTAAGAATACATTTTATGAAACATTACCAGTGGCAATTAATGGAATGGACC
CACCAAGATTCTCCTGAATTATTTTGGAAACTATGTACCCAATTCATGGACACAGGATAATGGCTGCACT
CTTTGTGAATTCGATACAGTCGACTTGTCTGCAGTAGATGTCCATCCAAAACGTATCAATAGGTGTTTTTA
TTGAGCAACCAACCCCTTTTCTACCTCGGTTTCTGGACATATTGTTGACACTGGATTACCCAAAAGAAGC
ACTTAACTTTTTATTTCATAACAAAGAAGTTTATCATGAAAAGGACATCAAGGTATTTTTTGATAAAGCT
AAGCATGAAATCAAACTATAAAAAATAGTAGGACCAGAAGAAAATCTAAGTCAAGCGGAAGCCAGAAACA
TGGGAATGGACTTTTGCCGTCAGGATGAAAAGTGTGATTACTTTAGTGTGGATGCAGATGTTGTTTT
GACAAATCCAAGGACTTTAAAAATTTTGATTGAACAAAACAGAAAGATCATTGCTCCTCTGTAACCTCGT
CATGAAAAGCTGTGGTCCAATTTCTGGGGAGCATTGAGTCTGATGGATACTATGCACGATCTGAAGATT
ATGTGGATATTGTTCAAGGGAATAGAGTAGGAGTATGGAATGTCCATATATGGCTAATGTGTACTTAAT
TAAAGGAAAGACACTCCGATCAGAGATGAATGAAAGGAATTTTTGTTCTGTGATAAACTGGATCCTGAT
ATGGCTCTTTGCCGAAATGCTAGAGAAATGGGTGATTTTATGTACATTTCTAATAGACATGAATTTGGAA
GGCTATTATCCACTGCTAATTACAATACTTCCCATTATAACAATGACCTCTGGCAGATTTTTGAAAATCC
TGTGGACTGGAAGGAAAAGTATATAAACCGTGATTATTCAAAGATTTTCACTGAAAATATAGTTGAACAG
CCCTGTCCAGATGCTTTTGGTTCCCATATTTTCTGAAAAGCCTGTGATGAATGGTAGAAGAAATGG
AACATTACGGCAATGGTCTGGGGAAAACATCATGATAGCCGTATATCTGGTGGTTATGAAAATGTCCC
AACTGATGATATCCACATGAAGCAAGTTGATCTGGAGAATGTATGGCTTCATTTTATCCGGGAGTTCATT
GCACCAGTTACACTGAAGGTCTTTGCAGGCTATTATACGAAGGGATTTGCACTACTGAATTTTGTAGTAA
AATACTCCCTGAACGACAGCGTTCTCTTCGCTCATCATGATGCTTCTACATTTACCATAAACATTGC
ACTTAATAACGTGGGAGAAGACTTTTCAGGGAGGTGGTTGCAAATTTCTAAGGTACAATTGCTCTATTGAG
TCACCACGAAAAGGCTGGAGCTTCATGCATCCTGGGAGACTCACACATTTGCATGAAGGACTTCTGTGTA
AAAATGGAACAAGATACATTGCAGTGTCATTTATAGATCCCTAA
    
```

Clone variation with respect to NM\_000935.2

- Restriction Sites:** Please inquire
- ACCN:** NM\_000935
- Insert Size:** 2500 bp
- 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).

<b>OTI Annotation:</b>	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.
<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>	<u><a href="#">NM_000935.2</a></u> , <u><a href="#">NP_000926.2</a></u>
<b>RefSeq Size:</b>	4009 bp
<b>RefSeq ORF:</b>	2214 bp
<b>Locus ID:</b>	5352
<b>UniProt ID:</b>	<u><a href="#">O00469</a></u>
<b>Cytogenetics:</b>	3q24
<b>Domains:</b>	2OG-Fell_Oxy, P4Hc
<b>Protein Pathways:</b>	Lysine degradation
<b>Gene Summary:</b>	<p>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. Mutations in the coding region of this gene are associated with Bruck syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) lacks an internal in-frame coding exon compared to transcript variant 1, resulting in a shorter isoform (2, also known as LH2a) missing a 21 aa protein segment compared to isoform 1.</p>