

## Product datasheet for **SC304924**

### Prol1 (OPRPN) (NM\_021225) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prol1 (OPRPN) (NM_021225) Human Untagged Clone
Tag:	Tag Free
Symbol:	Prol1
Synonyms:	BPLP; opiorphin; PRL1; PROL1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_021225 edited  
 CTTTCTCTTCTGGACTTTTAAATTGTGGCTACCTAAATTGAGTATCTGGCAAGAGTAAG  
 ATTAAGCAGTAATTTGTTCCAAAGAAGAATCTTCTACCAAGGAGCAACTTTAAAGAATGA  
 AATTAACCTTCTTCTGGCCTGTTGGCTCTTATTTTCATGTTTCACACCCAGTGAGAGTC  
 AAAGATTCTCCAGAAGACCATATCTACCTGGCCAGCTGCCACCACCTCCACTCTACAGGC  
 CAAGATGGGTTCCACCAAGTCCCCCACCTCCCTATGACTCAAGACTTAATTCACCACTTT  
 CTCTTCCCTTTGTCCCAGGGCGAGTTCACCATCTTCTTCTCTCGATTTAGCCAAGCAG  
 TCATTCTATCTCAACTCTTCCATTGGAATCTATTAGACAACCTCGACTCTTCCGGGTT  
 ATCCAAACCTACATTTCCACTAAGACCTTACTATGTAGGACCTATTAGGATATTTAAAC  
 CCCCATTTCTCCTATTCTTTTTTTCTTGCTATTTACCTTCCTATCTCTAACCCCTGAGC  
 CCCAAATAAACATCACCACCGCAGATACAACAATCACCACAAATCCCCCACCCTGCAA  
 CAGCAACCACCAGCACTTCCACAAAACCCACAATGACGATCAGCTCCTCAACAGTACCTA  
 TCTCTTCAACACCAGAGCCTGCCACCTCCATATCAGCAGCAACCCCGCAGCATCTACTG  
 AAAATACTACTCAAATTCGCCAACCGTCTCACACAGTATTGCTCAATGCCACTGTCC  
 AAGTTACGACTTCCAACCAAATATATTAAGCAGCCCAGCCTTTAAAAGTTTTGGCAA  
 AACTCTTTGCCATTTTGGTTGAACATGCAATAAATGATATTTCCAACTGCTCTGATA  
 TCTTAGAAGAAATAAAGTGAATGATTTTGGTGAACCAACCCCTGATCTAACCGCACAC  
 TAAATAAAGTATTTGAGCAATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_021225 unedited GAGGATTAAGTATACGACTCCTATAGGGCGGCCGCAATTTCGGCCATTACGGCCGGGGCT TTCTCTTCTTGGACTTTTAAATTGTGGCTACCTAAATTGAGTATCTGGCAAGAGTAAGAT TAAGCAGTAATTTGTTCCAAAGAAGAATCTTCTACCAAGGAGCAACTTTAAAGAATGAAA TTAACTTTCTTCTGGGCTGTTGGCTCTATTTTCATGTTTCACACCCAGTGAGAGTCAA AGATTCTCCAGAAGACCATATCTACCTGGCCAGCTGCCACCACCTCCACTCTACAGGCCA AGATGGGTTCCACCAAGTCCCCACCTCCCTATGACTCAAGACTTAATTCACCCTTTCT CTTCCCTTTGTCCAGGGCGAGTTCACCATCTTCTTTCTCTCGATTTAGCCAAGCAGTC ATTCTATCTCAACTCTTCCATTGGAATCTATTAGACAACCTCGACTCTTCCGGGTTAT CCAAACCTACATTTCCACTAAGACCTTACTATGTAGGACCTATTAGGATATTAACCC CCATTTCTCCTATTCTTTTTTTTCTTGCTATTTACCTTCTATCTAACCCTGAGCCC CAAATAAACATCACCCAGCAGATACAACAATCACACAATCCCCCACCCTGCAACA GCAACCACCAGCACTTCCACAAAACCCACAATGACGATCAGCTCCTCAACAGTACCTATC TCTTCAACACCAGAGCCTGCCACCTCCATATCAGCAGCAACCCCGCAGCATCTACTGAA AATACTACTCAAATTTCTGCCAACCGTCTCACACAGTATTGCTCAATGCCACTGTCCAA GTTACGACTTCCAACCAACTATTATTAAGCAGCCAGCCTTTAAAGGTTTTGCAAACT CTTTGCATTTTGTGACATGCAATAAATGATAATTTTCCAACCTGCTTCTGATATTCTTAG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_021225
<b>Insert Size:</b>	1000 bp
<b>OTI Disclaimer:</b>	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>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<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>	<a href="#">NM_021225.4</a> , <a href="#">NP_067048.4</a>
<b>RefSeq Size:</b>	1060 bp
<b>RefSeq ORF:</b>	747 bp
<b>Locus ID:</b>	58503
<b>UniProt ID:</b>	<a href="#">Q99935</a>
<b>Cytogenetics:</b>	4q13.3

**Protein Families:** Secreted Protein

**Gene Summary:** This gene encodes a member of the proline-rich protein family. The encoded protein has multiple proposed functions, including roles in pain suppression, penile erection, and protection of the eye surface. The QRFSR pentapeptide, known as opiorphin, is derived from the N-terminal of this protein. Opiorphin inhibits the enkephalin-inactivating peptidases neprilysin and aminopeptidase N, and this activity is thought to reduce sensitivity to painful stimuli by effecting enkephalin-related activation of opioid-dependent pathways. Opiorphin may also act as an anti-depressant. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]  
Transcript Variant: This variant (1) encodes the longer isoform (1).