

## Product datasheet for **SC300081**

### Collagen X (COL10A1) (NM\_000493) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Collagen X (COL10A1) (NM_000493) Human Untagged Clone
Tag:	Tag Free
Symbol:	Collagen X
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 sequence for NM\_000493 edited  
 CCAGCACGCAGAAATCCATCTGAGAATATGCTGCCACAAATACCCTTTTTGCTGCTAGTAT  
 CCTTGAACCTGGTTCATGGAGTGTTCACGCTGAACGATACCAAATGCCACAGGCATAA  
 AAGGCCACTACCAACACCAAGACACAGTTCTTCATTCCTACACCATAAAGAGTAAAG  
 GTATAGCAGTAAGAGGAGAGCAAGGTAATCCTGGTCCACCAGGCCTGCTGGACCTCGAG  
 GGCACCCAGGTCCTTCTGGACCACCAGGAAAACCAGGCTACGGAAGTCTGGACTCCAAG  
 GAGAGCCAGGTTGCCAGGACCACCGGGACCATCAGCTGTAGGGAACCAGGTGTGCCAG  
 GACTCCCAGGAAAACCAGGAGAGAGAGGACCATATGGACCAAAAAGGAGATGTTGGACCAG  
 CTGGCCTACCAGGACCCCGGGGCCACCAGGACCCTGGAATCCTGGACCGGCTGGAA  
 TTTCTGTGCCAGGAAAACCTGGACAACAGGGACCCACAGGAGCCCAGGACCCAGGGGCT  
 TTCCTGGAGAAAAGGTCACCAGGAGTCCCTGGTATGAATGGACAGAAAGGGAAATGG  
 GATATGGTGTCTGGTCCAGGTGAGAGGGTCTCCAGGCCCTCAGGGTCCCACAG  
 GACCATCTGGCCCTCTGGAGTGGGAAAAGAGGTGAAAATGGGGTCCAGGACAGCCAG  
 GCATCAAAGGTGATAGAGGTTTTCCGGGAGAAAATGGGACCAATTGGCCCACCAGGTCCT  
 AAGGCCCTCTGGGGAACGAGGGCCAGAAGGCATTGGAAGCCAGGAGCTGCTGGAGCCC  
 CAGGCCAGCCAGGGATTCCAGGAACAAAAGGTCTCCCTGGGGCTCCAGGAATAGCTGGGC  
 CCCCAGGGCCTCCTGGCTTTGGGAAACCAGGCTTGCCAGGCTGAAGGGAGAAAGAGGAC  
 CTGCTGGCCTTCTGGGGTCCAGGTGCCAAAGGGGAACAAGGGCCAGCAGGTCTTCTG  
 GGAAGCCAGGTCTGACTGGACCCCTGGGAATATGGGACCCCAAGGACCAAAAAGGCATCC  
 CGGGTAGCCATGGTCTCCAGGCCCTAAAGGTGAGACAGGGCCAGCTGGGCCTGCAGGAT  
 ACCCTGGGGCTAAGGGTGAAGGGGTTCCCTGGGTGAGTGGAAAACCAGGGTACCCAG  
 GAAAACCAGGTCTCGATGGTCTAAGGGTAACCCAGGGTACCAGGTCCAAAAGGTGATC  
 CTGGAGTTGGAGGACCTCTGGTCTCCAGGCCCTGTGGGCCAGCAGGAGCAAAGGGAA  
 TGCCCGGACACAATGGAGAGGCTGGCCCAAGAGGTGCCCTGGAATACCAGGTACTAGAG  
 GCCCTATTGGGCCACCAGGCATTCCAGGATTCCCTGGGTCTAAAGGGGATCCAGGAAGTC  
 CCGGTCTCTGGCCAGCTGGCATAGCAACTAAGGGCCTCAATGGACCCACCGGGCCAC  
 CAGGGCTCCAGGTCCAAGAGGCCACTCTGGAGAGCCTGGTCTTCCAGGGCCCCCTGGGC  
 CTCCAGGCCACCAGGTCAAGCAGTCATGCCTGAGGGTTTTATAAAGGCAGGCCAAAGGC  
 CCAGTCTTTCTGGGACCCCTCTTGTTAGTGCCAACCAGGGGTAACAGGAATGCCTGTGT  
 CTGCTTTTACTGTTATTCTCTCAAAGCTTACCCAGCAATAGGAACTCCCATAACCATTTG  
 ATAAAATTTGTATAACAGGCAACAGCATTATGACCCAAGGACTGGAATCTTTACTTGTC  
 AGATACCAGGAATATACTATTTTCATACCACGTGCATGTGAAAGGGACTCATGTTGGG  
 TAGGCCTGTATAAGAATGGCACCCCTGTAAATGTACACCTATGATGAATACACCAAAGGCT  
 ACCTGGATCAGGCTTCAGGGAGTGCCATCATCGATCTCACAGAAAATGACCAGGTGTGGC  
 TCCAGCTTCCCAATGCCGAGTCAAATGGCCTATACTCCTCTGAGTATGTCCACTCCTCTT  
 TCTCAGGATTCCTAGTGGCTCCAATGTGAGTACACCCACAGAGCTAATCTAAATCTTGT  
 GCTAGAAAAGCATTCTAACTCTACCCACCCTACAAAATGCATATGGAGGTAGGCTG  
 AAAAGAATGTAATTTTTATTTCTGAAAACAGATTTGAGCTATCAGACCAACAAACCTT  
 CCCCCTGAAAAGTGAGCAGCA

**Restriction Sites:** Please inquire

**ACCN:** NM\_000493

**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:** 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>	<u><a href="#">NM_000493.2</a></u> , <u><a href="#">NP_000484.2</a></u>
<b>RefSeq Size:</b>	3285 bp
<b>RefSeq ORF:</b>	2043 bp
<b>Locus ID:</b>	1300
<b>UniProt ID:</b>	<u><a href="#">Q03692</a></u>
<b>Cytogenetics:</b>	6q22.1
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	This gene encodes the alpha chain of type X collagen, a short chain collagen expressed by hypertrophic chondrocytes during endochondral ossification. Unlike type VIII collagen, the other short chain collagen, type X collagen is a homotrimer. Mutations in this gene are associated with Schmid type metaphyseal chondrodysplasia (SMCD) and Japanese type spondylometaphyseal dysplasia (SMD). [provided by RefSeq, Jul 2008]