

## Product datasheet for **RC221097**

### Collagen XI alpha 2 (COL11A2) (NM\_080680) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Collagen XI alpha 2 (COL11A2) (NM_080680) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Collagen XI alpha 2
Synonyms:	DFNA13; DFNB53; FBCG2; HKE5; OSMEDA; OSMEDB; PARP; STL3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221097 representing NM_080680 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
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**Protein Sequence:**

>RC221097 representing NM\_080680  
Red=Cloning site Green=Tags(s)

MERCSRCHRLLLLLPLVLGLSAAPGWAGAPPVDVLRALRFPSPDGVRRAKGICPADVAYRVARPAQLSA  
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EEIFGSLDSLREEIEQMRRTGTQD SPARTCQDLKLCHELPDGEYWVDPNQGCARDAFRVFCNFTAGGE  
TCVTPRDDVTQFSYVDSESPVGVVQLTFLRLLSVSAHQDVSYPGSGAARDGPLRLRGANEDELSPETSP  
YVKEFRDGCQTQQGRTVLEVRTVLEQLPVLDA SFSDLGAPRRGGVLLGPVCFMG

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4436\\_h08.zip](https://cdn.origene.com/chromatograms/mg4436_h08.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_080680

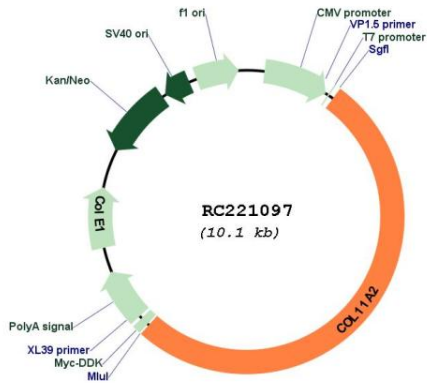
**ORF Size:** 5208 bp

**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.

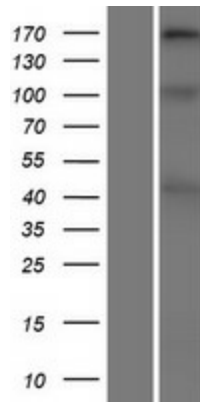
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_080680.1</a> , <a href="#">NP_542411.1</a>
<b>RefSeq Size:</b>	6414 bp
<b>RefSeq ORF:</b>	5211 bp
<b>Locus ID:</b>	1302
<b>UniProt ID:</b>	<a href="#">P13942</a>
<b>Cytogenetics:</b>	6p21.32
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	ECM-receptor interaction, Focal adhesion
<b>MW:</b>	169.2 kDa
<b>Gene Summary:</b>	This gene encodes one of the two alpha chains of type XI collagen, a minor fibrillar collagen. It is located on chromosome 6 very close to but separate from the gene for retinoid X receptor beta. Type XI collagen is a heterotrimer but the third alpha chain is a post-translationally modified alpha 1 type II chain. Proteolytic processing of this type XI chain produces PARP, a proline/arginine-rich protein that is an amino terminal domain. Mutations in this gene are associated with type III Stickler syndrome, otospondylomegaepiphyseal dysplasia (OSMED syndrome), Weissenbacher-Zweymuller syndrome, autosomal dominant non-syndromic sensorineural type 13 deafness (DFNA13), and autosomal recessive non-syndromic sensorineural type 53 deafness (DFNB53). Alternative splicing results in multiple transcript variants. A related pseudogene is located nearby on chromosome 6. [provided by RefSeq, Jul 2009]

Product images:



Circular map for RC221097



Western blot validation of overexpression lysate (Cat# [LY409104]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221097 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).