

#### OriGene Technologies, Inc.

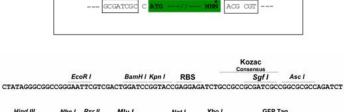
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# Product datasheet for RG211658

#### Collagen X (COL10A1) (NM\_000493) Human Tagged ORF Clone

### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Collagen X (COL10A1) (NM_000493) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Collagen X
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling:



ORF

Mlu I

Hind III Nhe I Rsr II Mlu I Not I Xho I GFP 1ag CAAGCTTAACTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --T R T R P L E M E S D - -

---- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT ---- E E R V Stop

Sgfl

ACCN: ORF Size: NM\_000493 2040 bp

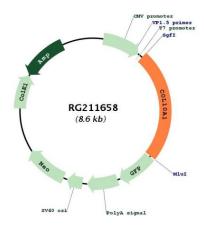


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	en X (COL10A1) (NM_000493) Human Tagged ORF Clone – RG211658
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. 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 <u>custsupport@origene.com</u> 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. <u>More info</u>
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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>
RefSeq:	<u>NM 000493.4</u>
RefSeq Size:	3285 bp
RefSeq ORF:	2043 bp
Locus ID:	1300
UniProt ID:	<u>Q03692</u>
Cytogenetics:	6q22.1
Protein Families:	Druggable Genome
Gene Summary:	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]

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## **Product images:**



Circular map for RG211658

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