

## Product datasheet for **MG225252**

### Col1a2 (NM\_007743) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Col1a2 (NM_007743) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Col1a2
Synonyms:	AA960264; AI325291; Co; Col; Col1; Col1a-2; Cola-2; Cola2; oim
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225252 representing NM_007743 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >MG225252 representing NM\_007743  
 Red=Cloning site Green=Tags(s)

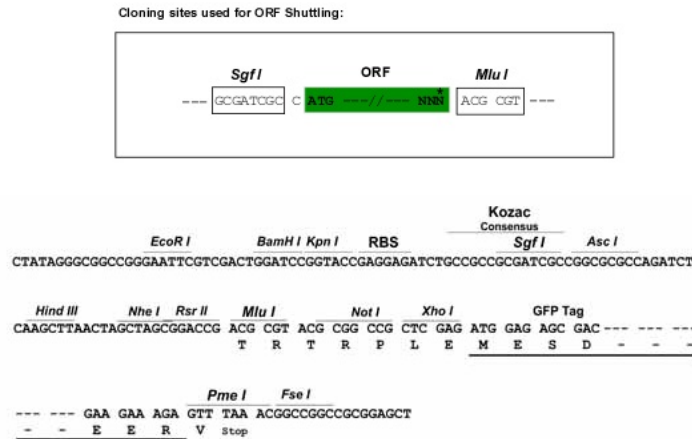
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TRTRPLE - GFP Tag - V

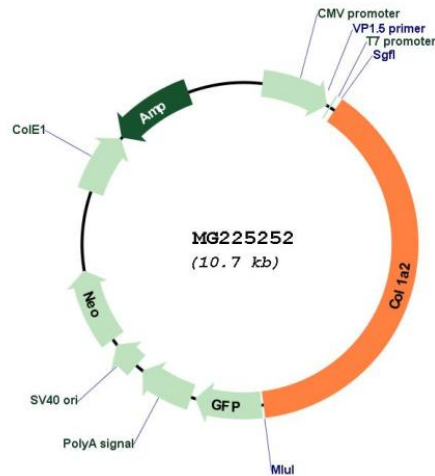
Restriction Sites:

SgfI-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_007743

ORF Size: 4116 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](#)

**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:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_007743.2](#)

RefSeq Size: 5143 bp

RefSeq ORF: 4119 bp

Locus ID: 12843

UniProt ID: [Q01149](#)

Cytogenetics: 6 1.81 cM

**Gene Summary:** This gene encodes the alpha-2 subunit of the fibril-forming type I collagen, the most abundant protein of bone, skin and tendon extracellular matrices. The encoded protein, in association with alpha-1 subunit, forms heterotrimeric type I procollagen that undergoes proteolytic processing during fibril formation. Mice harboring certain mutations in the encoded gene exhibit symptoms of moderate to severe forms of osteogenesis imperfecta. [provided by RefSeq, Dec 2015]