

Product datasheet for MC224353

Col1a2 (NM_007743) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Col1a2 (NM_007743) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Col1a2
Synonyms:	AA960264; AI325291; Co; Col; Col1; Col1a-2; Cola-2; Cola2; oim
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224353 representing NM_007743 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCAGCTTTGTGGATACGCGGACTCTGTTGCTGCTTGCAGTAACTTCGTGCCTAGCAACATGCCAAT
ATTTGCAATCGGGATCAGTACGAAAGGGCCCCACTGGAGACAGAGGACCACGTGGACAAAGGGTCCC
AGGTCCCCGAGGCAGAGATGGTGTGATGGTCCCATGGGCCCTCTGGTCCCCCTGGCTCCCCTGGTCT
CCCGGCTCCCCTGCCCCCTGGTCTTACTGGAACTTTGCTGCTCAGTATTCTGACAAAGGAGTTTCAT
CTGGCCCTGGACCAATGGGTTTAAATGGGACCCAGAGGCCCTCCTGGTGTCTTGGAGCCCTGGCCCTCA
AGGTTTCCAAGGACCTGCTGGTGAACCTGGTGAACCTGGTCAAACGGGTCTGCAGGTCCCCTGGTCCA
GCTGGCTCTCCTGGCAAGGCTGGTGAAGATGGTCAACCCTGGAAAACCCGGAAGACCTGGGAGAGAGGAG
TCGTTGGACCACAGGGTCTCGTGGTTTCCCCGGGACTCCTGGACTTCTGGCTTCAAAGGCGTGAAGG
ACACAGTGGTATGGATGGATTAAGGGACAGCCTGGTGCACAGGGTGTGAAGGGTGAACCCGGTGGCCCT
GGAGAGAATGGAATCCAGGTCAAGCAGGAGCCGAGGGCTTCTGGTGAAGAGGGCGTGTGGAGCTC
CTGGTCCAGCTGGTGGCCGAGGCAGTGAAGAGCGTTGGCCCGTGGCCCTGCTGGTCCCATTGGGTCT
TGCTGGACCCCTGGTTTCCAGGTGCTCCTGGTCCCAAGGGTGAACCTGGCCCTTTTGGACCTCCTG
GCAACCCTGGAACAAATGGGCTCACTGGCGCCAAGGGTGTACTGGACTCCCTGGTGTGCTGGGGCTCC
CGGTCTCCTGGCCCCCTGGTATTCTGGCCCCGCTGGTGTCTGGTGTACAGGTGCCAGAGGACTT
GTTGGTGAAGCTGGTCTGCTGGCTCCAAGGAGAATCCGGTAACAAGGGTGAAGCTGGCTCTGTTGGAG
CCCAAGGTCTCCTGGTCCCAGCGGTGAAGAAGGAAAGAGAGGGTCTCCCGGAGAAGCTGGATCTGCTGG
CCCTGCAGGGCTCCAGGGCTTAGAGGCAGCCCTGGTTCTCGAGGTCTTCTGGAGCTGATGGCAGAGCT
GGTGAATGGGTCTCCTGGCAATCGTGGTTCAACCGGCCCTGCTGGAATCCGAGGTCTAATGGAGATG
CCGGTCGACCTGGGAACCTGGTCTCATGGGACCCAGAGGTCTTCTGGGTCTCCTGAAATGTTGGCC
ATCTGGTAAAGAAGGCCCTGGGTCTCCTGGCATTGATGGCAGACTGGCCCAATCGGCCAGCTGGA



CCAAGAGGTGAAGCTGGCAACATCGGATTCCTGGACCCAAAGGCCCTCTGGTGATCCTGGCAAACCTG
 GTGAGAGAGGACACCCCGGTCTTGCTGGTCTCGGGGAGCTCCAGGACCCGATGGCAACAATGGAGCTCA
 GGGCCCCCTGGACCCAGGGTGTCAAGGTGGCAAAGGTGAACAAGGCCCTGCTGGTCTCCTGGCTTC
 CAGGGTCTCCCTGGTCCCTCAGTACTACTGGAGAAGTTGGCAAGCCGGAGAAAGGGTCTTCTGGTG
 AATTCGGTCTCCCTGGTCTGCTGGTCCAAGAGGAGAAGTGGTACCCCGGTGAGAGTGGAGCTGCTGG
 CCCTTCGGTCTATTGGAAGCCGAGGTCCCAGTGGAGCCCAAGGCCTGATGGAACAAGGGTGAAGCT
 GGTGCAGTCGGTCTCCAGGCAGTGGTGGTCCCTGGGCTGGTGGGCTCCAGGAGAGAGGGGTGCTG
 CTGGCATACCTGGGGCAAGGAGAAAAGGGTGAACCTGGTCTCCGAGGTGACACTGGCAACACTGGTAG
 AGATGGTCTCGTGGCATTCTGGTCTGTAGGTGCCCTGGTCTGCTGGGGCTCAGGTGACCGGGT
 GAAGCTGGTCTGCCGTCTTCTGGCCAGTGGTCTCGGGTAGCCCTGGTGAACGTGGTGAAGTTG
 GCCCTGCTGGCCCAATGGATTGCTGGTCTGCTGGTCTGCTGGCAACCCGGTCTAAAGGAGAGAA
 GGAACCAAGGGCTAAGGGTGAATGGCATTGTTGGTCCAACCGGTCTGTTGGAGCTGCTGGCCCA
 TCTGGTCTAATGGCCACCTGGTCTGTTGAAGTCGTGGTATGGAGGGCCCCCTGGTATGACTGGCT
 TCCCTGGTCTGCTGGACGGACTGGTCCCCCGGACCCAGTGGTATTGCTGGCCCCCTGGCCCCCTGG
 TGCTGCTGAAAGGAAGGATTCTGGTCCCCGTGGCGACCAAGTCCAGTTGGCCGAACGGAGAAACA
 GGTGCATCTGGACCCCTGGATTTGTTGGTGAAGGGTCCCTCTGGAGAACCTGGTACCGCAGGAGCCC
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 ACGTGGTCTGCCAGGTATTGCTGGTCTCTGGTGAACCTGGTCTCTGGGCATCTCAGGCCCTCTGGT
 GCCCGTGGTCCCCTGGTCTGTGGCAGCCCTGGAGTTAATGGTGGCCCTGGTGAAGCTGGTCTGATG
 GTAACCTGGCAGCGATGGTCCCCAGGTCTGATGGTCAAGCTGGACACAAGGGAGAGCGTGGTTACCC
 TGGCAGCATTGGTCCGACTGGTCTGCAGGTGCCCTGGTCTCACGGTCTGTGGGTCTGCTGGGAAA
 CATGGAACCCGAGGTGAACCTGGTCTGCCGGTCTGTTGGTCTGTTGGTCTGTTGGTCCAAGAGGTG
 CTAGTGGTCTCAAGGCATCCGAGGTGACAAAGGAGAACCTGGTGAATAAGGGCACAGGGTCTTCTGG
 CTAAAAGGATACAGTGGATTGACAGGGTCTTCTGGTCTTCTGGTCTACATGGTGACCAAGGAGCTCT
 GGTCTGTGGTCTGCTGGTCCAGGGTCTGCTGGGCTTCTGGACCCGTTGGCAAAGATGGTATGAT
 CTGGGCAACCTGGCCAGTCGGGCTGCTGGTGTCTGGTCTCAGGGTAGCCAAGTCCCGCTGGTCC
 CCCTGGTCCCCTGGACCTCCTGGTCTCCTGGTGTGAGCGGAGGTGGCTATGACTTTGGTTTTGAAGGA
 GACTTCTACAGGGCTGACCAGCTCGCTCCAGCCTTCACTCAGACCCAAGGACTATGAAGTTGATGCAA
 CTCTGAAATCTCTAATAACCAGATTGAGACCCTTCTCACTCTGAAGGCTCTAGAAAGAACCCTGCTCG
 CACGTGCCGGACTTAAGACTCAGCCACCAGAGTGAACAGCGATTACTACTGGATTGACCTAACCAA
 GGATGACTATGGATGCCATCAAAGTGTACTGTGATTTCTACTGGTGAACCTGCATCCAGGCCAAC
 CTGTAAACACCCAGCGAAGAAGCTCATACAGCCGCGCCAGGCCAACAGCATGTCTGGTTAGGAGAGAC
 TATCAATGGTGGCAGCCAGTTTGAATACAACGTAGAAGGGTGTCTCCAAGGAAATGGCAACTAGCTC
 GCCTTCATGCGCCTGCTAGCCAACCGTCTTCTCAGAACATCACCTACCCTGCAAGAACAGCATTGCGT
 ACCTGGATGAGGAGACGGGCAGCTTGAACAAGGCTGTGCTTCTGCAGGGTCCAACGATGTTGAACCTGT
 TGCTGAGGGCAACAGCAGGTTACCTACTCTGTCTAGTCGATGGCTGCTCCAAAAGACAAATGAATGG
 GGCAAGACAATCATTGAATACAAAACAATAAGCCATCTCGCCTGCCGTCTTGGACATTGCACCTCTGG
 ACATTGGTGGTCTGACCAAGAATCCGTGGAGGTTGGCCCCGTCTGTTTCAAA**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
 ACCN: NM_007743
 Insert Size: 4119 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 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](#)

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_007743.3](#), [NP_031769.2](#)

RefSeq Size: 5222 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]