

Product datasheet for **RC228226**

Collagen XI alpha 2 (COL11A2) (NM_001163771) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Collagen XI alpha 2 (COL11A2) (NM_001163771) 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: >RC228226 representing NM_001163771
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCGGTGCAGCCGCTGCCATCGCCTCCTCCTCCTACCTCTGGTCTGGGGCTGAGCGCGGCC
CAGGCTGGGCAGGTGCACCCCTGTGGATGTGCTCCGGGCCCTGAGGTTCCCTCCTCCTGATGGTGT
CCGGAGAGCGAAAGGCATCTGTCCAGCTGATGTGGCTACCGAGTGGCACGACCTGCCAGCTCAGTGCA
CCCCTCGCCAGCTTTCCAGGAGGATTTCCAAAGATTTCTCTCTGCTGACTGTTGTCGGACCCGCC
CTGGTCTCCAAGCTCCCCTCCTGACTCTCTACAGTGGCCAGGGTGTCCGACAGCTGGGCTGGAGCTGG
CCGACCTGTCCGCTTCTGTATGAAGACCAGACTGGGCGGCCCAACCTCCCTCTCAGCCAGTCTTCCGA
GGCCTCAGCCTAGCAGATGGCAAGTGGCACCGTGTGGCTGTGGCTGTGAAGGGCCAGTCTGTACCCCTCA
TTGTTGACTGCAAGAAGCGAGTCACCCGGCCTCTCCCGAAGTCTCGTCCAGTATTGGACACCCATGG
AGTGATCATCTTTGGTGCCCGTATTCTGGATGAAGAAGTCTTTGAGGGTGTGTCAGGAGCTGGCCATT
GTCCAGGGGTCCAGGCAGCCTATGAATCATGTGAACAGAAGGAGCTGGAATGCGAGGGGGCCAGAGGG
AAAGACCCAAAACCAACAGCCTCACAGAGCCAGAGATCTCCACAGCAGCAACCATCAAGACTTCACAG
GCCAAAAATCAGGAACCCAGAGCCAGGTGAGGGAGCTGGGAGAACCCCAAGTGCAGCACACCCACAGA
GAGGAAGACACCCAGGCATCTCTCCTCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228226 representing NM_001163771
Red=Cloning site Green=Tags(s)

MERCSRCHRLLLLLPLVLGLSAAPGWAGAPPVDVLRALRFPPLPDGVRRRAKGICPADVAYRVARPAQLSA
 PTRQLFPGGFPKDFSLLTVVRTRPGLQAPLLTL YSAQGVRLGLELGRPVRFLYEDQTGRPQPPSQPVFR
 GLSLADGKWHRVAVAVKQSVTLIVDCKKRVTRPLPR SARPVLDTHGVIIFGARILDEEVFEGDVQELAI
 VPGVQAAYESCEQKELECEGGQRERPNQQPRAQRSPQQQPSRLHRPQNQEPQSQVRELGEPPSAAHPR
 EGRHPGISPP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1267_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001163771

ORF Size: 870 bp

OTI Disclaimer: 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_001163771.2](#)

RefSeq ORF: 873 bp

Locus ID: 1302

UniProt ID: [P13942](#)

Cytogenetics: 6p21.32

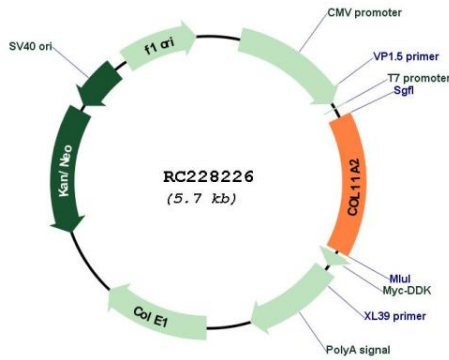
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ECM-receptor interaction, Focal adhesion

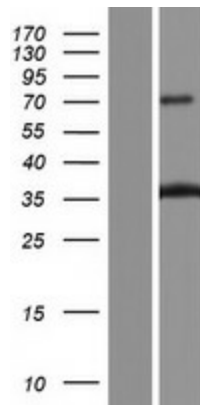
MW: 31.96 kDa

Gene Summary: 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, otospondylomegalepiphyseal 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 RC228226



Western blot validation of overexpression lysate (Cat# [LY431254]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228226 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).