

Product datasheet for **SC303083**

Collagen IX (COL9A1) (NM_001851) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Collagen IX (COL9A1) (NM_001851) Human Untagged Clone
Tag:	Tag Free
Symbol:	COL9A1
Synonyms:	DJ149L1.1.2; EDM6; MED; STL4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

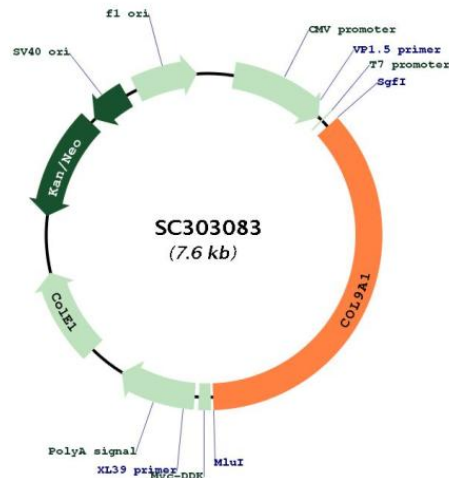


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Fully Sequenced ORF: >SC303083 representing NM_001851.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001851

Insert Size: 2766 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001851.4](#)

RefSeq Size: 3805 bp

RefSeq ORF: 2766 bp

Locus ID: 1297

UniProt ID: [P20849](#)

Cytogenetics:	6q13
Protein Families:	Druggable Genome
MW:	91.9 kDa
Gene Summary:	<p>This gene encodes one of the three alpha chains of type IX collagen, which is a minor (5-20%) collagen component of hyaline cartilage. Type IX collagen is usually found in tissues containing type II collagen, a fibrillar collagen. Studies in knockout mice have shown that synthesis of the alpha 1 chain is essential for assembly of type IX collagen molecules, a heterotrimeric molecule, and that lack of type IX collagen is associated with early onset osteoarthritis. Mutations in this gene are associated with osteoarthritis in humans, with multiple epiphyseal dysplasia, 6, a form of chondrodysplasia, and with Stickler syndrome, a disease characterized by ophthalmic, orofacial, articular, and auditory defects. Two transcript variants that encode different isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1, also known as the long form).</p>