

## Product datasheet for RC211766

### Collagen III (COL3A1) (NM\_000090) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Collagen III (COL3A1) (NM_000090) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Collagen III
Synonyms:	EDS4A; EDSVASC; PMGEDSV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211766 representing NM_000090. Blue=ORF Red=Cloning site Green=Tag(s)

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**Protein Sequence:** >Peptide sequence encoded by RC211766  
 Blue=ORF Red=Cloning site Green=Tag(s)

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 TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Recombinant protein using RC211766 also available, [TP311766](#)

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2674\\_a05.zip](https://cdn.origene.com/chromatograms/mg2674_a05.zip)

**Restriction Sites:** SgfI-MluI

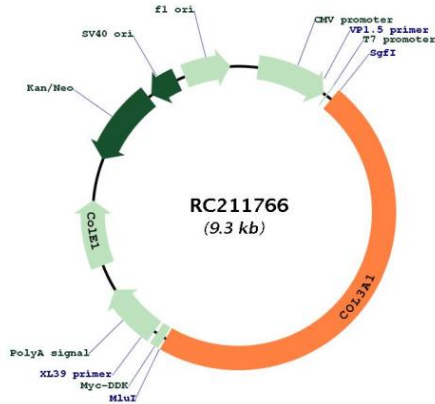
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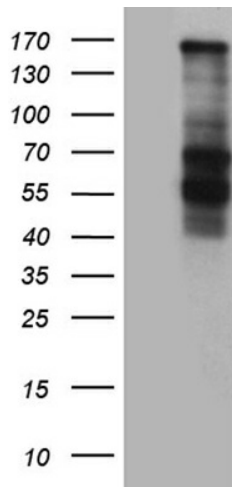
**ACCN:** NM\_000090

<b>ORF Size:</b>	4398 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_000090.4</a>
<b>RefSeq Size:</b>	5489 bp
<b>RefSeq ORF:</b>	4401 bp
<b>Locus ID:</b>	1281
<b>UniProt ID:</b>	<a href="#">P02461</a>
<b>Cytogenetics:</b>	2q32.2
<b>Domains:</b>	COLFI, VWC, Collagen
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	ECM-receptor interaction, Focal adhesion
<b>MW:</b>	138.6 kDa
<b>Gene Summary:</b>	This gene encodes the pro-alpha1 chains of type III collagen, a fibrillar collagen that is found in extensible connective tissues such as skin, lung, uterus, intestine and the vascular system, frequently in association with type I collagen. Mutations in this gene are associated with Ehlers-Danlos syndrome types IV, and with aortic and arterial aneurysms. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene. [provided by R. Dalgleish, Feb 2008]

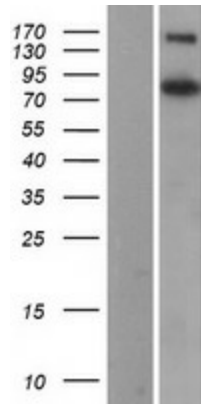
Product images:



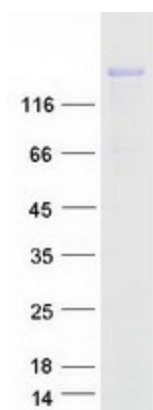
Circular map for RC211766



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY COL3A1 (Cat# RC211766, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-COL3A1 antibody (Cat# [TA812161]). Positive lysates [LY400026] (100ug) and [LC400026] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400026]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211766 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COL3A1 protein (Cat# [TP311766]). The protein was produced from HEK293T cells transfected with COL3A1 cDNA clone (Cat# RC211766) using MegaTran 2.0 (Cat# [TT210002]).