

## Product datasheet for **RG240216**

### Collagen V (COL5A1) (NM\_001278074) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Collagen V (COL5A1) (NM_001278074) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Collagen V
Synonyms:	EDSC; EDSC1; FMDMF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240216 representing NM_001278074. Blue=ORF Red=Cloning site Green=Tag(s)

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**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

**Protein Sequence:**

>Peptide sequence encoded by RG240216  
 Blue=ORF Red=Cloning site Green=Tag(s)

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**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV**  
**MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIIGDFKVMGTGFPED**  
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**FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV**

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


<b>ACCN:</b>	NM_001278074
<b>ORF Size:</b>	5514 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>RefSeq:</b>	<a href="#">NM_001278074.1</a> , <a href="#">NP_001265003.1</a>
<b>RefSeq Size:</b>	8455 bp
<b>RefSeq ORF:</b>	5517 bp
<b>Locus ID:</b>	1289
<b>Cytogenetics:</b>	9q34.3

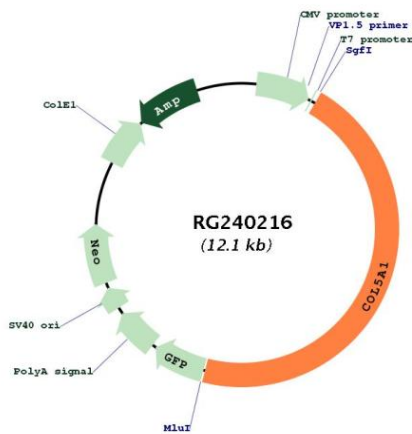
**Protein Families:** Druggable Genome

**Protein Pathways:** ECM-receptor interaction, Focal adhesion

**MW:** 184.1 kDa

**Gene Summary:** This gene encodes an alpha chain for one of the low abundance fibrillar collagens. Fibrillar collagen molecules are trimers that can be composed of one or more types of alpha chains. Type V collagen is found in tissues containing type I collagen and appears to regulate the assembly of heterotypic fibers composed of both type I and type V collagen. This gene product is closely related to type XI collagen and it is possible that the collagen chains of types V and XI constitute a single collagen type with tissue-specific chain combinations. The encoded procollagen protein occurs commonly as the heterotrimer pro-alpha1(V)-pro-alpha1(V)-pro-alpha2(V). Mutations in this gene are associated with Ehlers-Danlos syndrome, types I and II. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2013]

**Product images:**



Circular map for RG240216