

Product datasheet for **RC216003**

COL8A2 (NM_005202) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COL8A2 (NM_005202) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COL8A2
Synonyms:	FECD; FECD1; PPCD; PPCD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC216003 representing NM_005202
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGGACTCTGACACCCCTGTCTTCGCTGCTGCTGCTACTGGTCTGGTCTGGGGTGTGGGC
 CGCGGGCTCCTCTGGTGGCGGGGCCGGTGGGGCAGCGGGCTATGCCCCAGTGAAGTACATCCAGCCCAT
 GCAGAAAGGACCTGTGGGACCGCCCTTCCTGTAGGGCAAAGGCCAGTACCTGAAATGCCTCTACCGCTG
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 TGCCCCACA

ACGCGTACGCGGGCCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216003 representing NM_005202
 Red=Cloning site Green=Tags(s)

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MLGTLTPLSSLLLLLVLVLCGCPRASSGGGAGGAAGYAPVKYIQPMQKGPVGGPPFREGKGQYLEMPLPL
LPMDLKGEPGPPGKPGPRGPPGPPGPFPGKPGMGKPLHGGQPGPAGPPGF SRMGKAGPPGLPGKVGPPGQP
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GQPLGAPGAPGQGAPGPPGLPGPAGLGPGLDGLPGAPGDKGESGPPGVPGRGEPGAVGPKGPPGVDGV
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CPT
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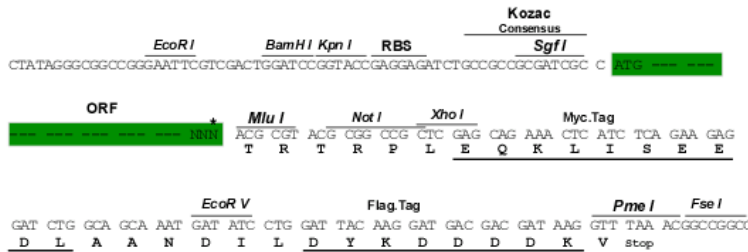
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6170_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005202

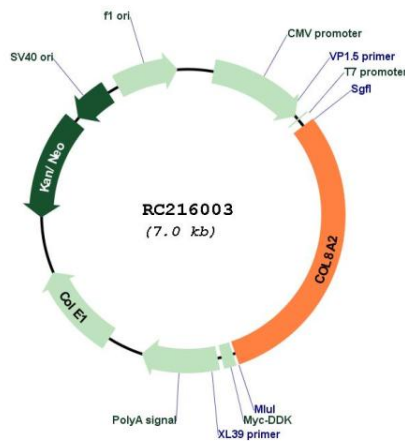
ORF Size: 2109 bp

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](#)

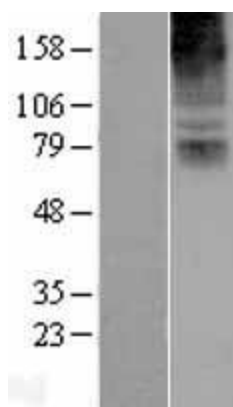
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none"> 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:	<u>NM_005202.4</u>
RefSeq Size:	4443 bp
RefSeq ORF:	2112 bp
Locus ID:	1296
UniProt ID:	<u>P25067</u>
Cytogenetics:	1p34.3
Protein Families:	Druggable Genome
MW:	67.24 kDa
Gene Summary:	This gene encodes the alpha 2 chain of type VIII collagen. This protein is a major component of the basement membrane of the corneal endothelium and forms homo- or heterotrimers with alpha 1 (VIII) type collagens. Defects in this gene are associated with Fuchs endothelial corneal dystrophy and posterior polymorphous corneal dystrophy type 2. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014]

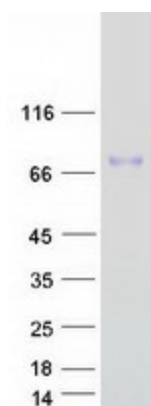
Product images:



Circular map for RC216003



Western blot validation of overexpression lysate (Cat# [LY401592]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216003 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COL8A2 protein (Cat# [TP316003]). The protein was produced from HEK293T cells transfected with COL8A2 cDNA clone (Cat# RC216003) using MegaTran 2.0 (Cat# [TT210002]).