OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC300008

Collagen IV (COL4A3) (NM_000091) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Collagen IV (COL4A3) (NM_000091) Human Untagged Clone
Tag:	Tag Free
Symbol:	Collagen IV
Synonyms:	ATS2; ATS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>SC300008 representing NM_000091.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTA
CCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCCC
ATGAGCGCCCGGACCGCCCCCAGGCCGCAGGTGCTCCTGCTGCCGCTCCTGCTGGTGCTCCTGGCGGCG
GCGCCCGCAGCCAGCAAGGGTTGTGTCTGTAAAGACAAAGGCCAGTGCTTCTGTGACGGGGCCAAAGGG
GAGAAGGGGGAGAAGGGCTTTCCTGGACCCCCCGGTTCTCCTGGCCAGAAAGGATTCACAGGTCCTGAA
GGCTTGCCTGGACCGCAGGGACCCAAGGGCTTTCCAGGACTTCCAGGACTCACGGGTTCCAAAGGTGTA
AGGGGAATAAGTGGATTGCCAGGATTTTCTGGTTCTCCTGGACTTCCAGGCACCCCAGGCAATACCGGG
CCTTACGGACTTGTCGGTGTACCAGGATGCAGTGGTTCTAAGGGTGAGCAGGGGTTTCCAGGACTCCCA
GGGACACTGGGCTACCCAGGGATCCCGGGTGCTGCTGGTTTGAAAGGACAAAAGGGTGCTCCTGCTAAA
GAAGAAGATATAGAACTTGATGCAAAAGGCGACCCCGGGTTGCCAGGGGCTCCAGGACCCCAGGGTTTG
CCAGGCCCTCCAGGTTTTCCTGGGCCTGTTGGCCCACCTGGTCCTCCGGGATTCTTTGGCTTTCCAGGA
GCCATGGGACCTAGAGGACCTAAGGGTCACATGGGTGAAAGAGTGATAGGACATAAAGGAGAGCGGGGT
GTGAAAGGGTTAACAGGACCCCCGGGACCACCAGGAACAGTTATTGTGACCCTAACTGGCCCAGATAAC
AGAACGGACCTCAAGGGGGAAAAGGGAGACAAGGGAGCAATGGGCGAGCCTGGACCTCCTGGACCCTCA
GGACTGCCTGGAGAATCATATGGATCTGAAAAGGGTGCTCCTGGAGACCCTGGCCTGCAGGGAAAACCC
GGAAAAGATGGTGTTCCTGGCTTCCCTGGAAGTGAGGGAGTCAAGGGCAACAGGGGTTTCCCTGGGTTA
ATGGGTGAAGATGGCATTAAGGGACAGAAAGGGGACATTGGCCCTCCAGGATTTCGTGGTCCAACAGAA
TATTATGACACATACCAGGAAAAGGGAGATGAAGGCACTCCAGGCCCACCAGGGCCCAGAGGAGCTCGT
GGCCCACAAGGTCCCAGTGGTCCCCCCGGAGTTCCTGGAAGTCCTGGATCATCAAGGCCTGGCCTCAGA
GGAGCCCCTGGATGGCCAGGCCTGAAAGGAAGTAAAGGGGAACGAGGCCGCCCAGGAAAGGATGCCATG
GGGACTCCTGGGTCCCCAGGTTGTGCTGGTTCACCAGGTCTTCCAGGATCACCGGGACCTCCAGGACCG
CCAGGTGACATCGTTTTTCGCAAGGGTCCACCTGGAGATCACGGACTGCCAGGCTATCTAGGGTCTCCA
GGAATCCCAGGAGTTGATGGGCCCAAAGGAGAACCAGGCCTCCTGTGTACACAGTGCCCTTATATCCCA
GGGCCTCCCGGTCTCCCAGGATTGCCAGGGTTACATGGTGTAAAAGGAATCCCAGGAAGACAAGGCGCA

View online »

GCTGGCTTGAAAGGAAGCCCAGGGTCCCCAGGAAATACAGGTCTTCCAGGATTTCCAGGTTTCCCAGGT
GCCCAGGGTGACCCAGGACTTAAAGGAGAAAAAGGTGAAACACTTCAGCCTGAGGGGCAAGTGGGTGTC
CCAGGTGACCCGGGGCTCAGAGGCCAACCTGGGAGAAAGGGCTTGGATGGAATTCCTGGAACTCCGGGA
GTGAAAGGATTACCAGGACCTAAAGGCGAACTGGCTCTGAGTGGTGAGAAAGGGGACCAAGGTCCTCCA
GGGGATCCTGGCTCCCCTGGGTCCCCAGGACCTGCAGGACCAGCTGGACCACCTGGCTACGGACCCCAA
GGAGAACCTGGTCTCCAGGGCACGCAAGGAGTTCCTGGAGCCCCCGGACCACCCGGAGAAGCCGGCCCT
AGGGGAGAGCTCAGTGTTTCAACACCAGTTCCAGGCCCACCAGGACCTCCAGGGCCCCCTGGCCATCCT
GGCCCCCAAGGTCCACCTGGTATCCCTGGATCCCTGGGGAAATGTGGAGATCCTGGTCTTCCAGGGCCT
GATGGTGAACCAGGAATTCCAGGAATTGGATTTCCTGGGCCTCCTGGACCTAAGGGAGACCAAGGTTTT
CCAGGTACAAAAGGATCACTGGGTTGTCCTGGAAAAATGGGAGAGCCTGGGTTACCTGGAAAGCCAGGC
CTCCCAGGAGCCAAGGGAGAACCAGCAGTAGCCATGCCTGGAGGACCAGGAACACCAGGTTTTCCAGGA
GAAAGAGGCAATTCTGGGGAACATGGAGAAATTGGACTCCCTGGACTTCCAGGTCTCCCTGGAACTCCA
GGAAATGAAGGGCTTGATGGACCACGAGGAGATCCAGGGCAGCCTGGACCACCTGGAGAACAAGGACCC
CCAGGAAGGTGCATAGAGGGTCCCAGGGGAGCCCAAGGACTTCCAGGCTTAAATGGATTGAAAGGGCAA
CAAGGCAGAAGAGGTAAAACGGGGCCAAAGGGAGACCCAGGAATTCCAGGCTTGGATAGATCAGGATTT
CCTGGAGAAACTGGATCACCAGGAATTCCAGGTCATCAAGGTGAAATGGGACCACTGGGTCAAAGAGGA
TATCCAGGAAATCCGGGAATTTTAGGGCCACCAGGTGAAGATGGAGTGATTGGGATGATGGGCTTTCCT
GGAGCCATTGGCCCTCCAGGGCCCCCTGGGAACCCAGGCACACCAGGGCAGAGGGGGAGCCCTGGAATT
CCAGGAGTAAAGGGCCAGAGAGGAACCCCAGGAGCCAAGGGGGAACAAGGAGATAAAGGAAATCCCGGG
CCTTCAGAGATATCCCACGTAATAGGGGACAAAGGAGAACCAGGTCTCAAAGGATTCGCAGGAAATCCA
GGTGAGAAAGGAAACAGAGGCGTTCCAGGGATGCCAGGTTTAAAGGGCCTCAAAGGACTACCCGGACCA
GCAGGACCACCAGGCCCCAGAGGAGATTTGGGCAGCACTGGGAATCCTGGAGAACCAGGACTGCGTGGT
ATACCAGGAAGCATGGGGAACATGGGCATGCCAGGTTCTAAAGGAAAAAGGGGAACTTTGGGATTCCCA
GGTCGAGCAGGAAGACCAGGCCTCCCAGGTATTCATGGTCTCCAGGGAGATAAGGGAGAGCCAGGTTAT
TCAGAAGGTACAAGGCCAGGACCACCGGGACCAACGGGGGATCCAGGACTGCCGGGTGATATGGGAAAG
AAAGGAGAAATGGGGCAACCTGGCCCACCTGGACATTTGGGGCCTGCTGGACCTGAGGGAGCCCCTGGA
AGTCCTGGAAGTCCTGGCCTCCCAGGAAAGCCAGGTCCTCATGGTGATTTGGGTTTTAAAGGAATCAAA
GGCCTCCTGGGCCCTCCAGGAATCAGAGGCCCTCCAGGTCTTCCAGGATTTCCAGGATCTCCTGGACCA
ATGGGTATAAGAGGTGACCAAGGACGTGATGGAATTCCTGGTCCAGCCGGAGAAAAGGGAGAAACGGGT
TTATTGAGGGCCCCTCCAGGCCCAAGAGGGAACCCTGGTGCTCAAGGAGCCAAAGGAGACAGGGGAGCC
CCAGGTTTTCCTGGCCTCCCGGGCAGAAAAGGGGCCATGGGAGATGCTGGACCTCGAGGACCCACAGGC
ATAGAAGGATTCCCAGGGCCACCAGGTCTGCCCGGTGCAATTATCCCTGGCCAGACAGGAAATCGTGGT
CCACCAGGCTCAAGAGGAAGCCCAGGTGCGCCTGGTCCCCCTGGACCTCCAGGGAGTCATGTAATAGGC
ATAAAAGGAGACAAAGGGTCTATGGGCCACCCTGGCCCAAAAGGTCCACCTGGAACTGCAGGAGACATG
GGACCACCAGGTCGTCTGGGAGCACCAGGTACTCCAGGTCTTCCAGGACCCAGAGGTGATCCTGGATTC
CAGGGGTTTCCAGGCGTGAAAGGAGAAAAGGGTAATCCTGGATTTCTAGGATCCATTGGACCTCCAGGA
CCAATTGGGCCAAAAGGACCACCTGGTGTACGTGGAGACCCTGGCACACTTAAGATTATCTCCCTTCCA
GGAAGCCCAGGGCCACCTGGCACACCTGGAGAACCAGGGATGCAGGGAGAACCTGGGCCACCAGGGCCA
CCTGGAAACCTAGGACCCTGTGGGCCAAGAGGTAAGCCAGGCAAGGATGGAAAACCAGGAACTCCTGGA
CCAGCTGGAGAAAAAGGCAACAAAGGTTCTAAAGGAGAGCCAGGACCAGCTGGATCAGATGGATTGCCA
GGTTTGAAAGGAAAACGTGGAGACAGTGGATCACCTGCAACCTGGACAACGAGAGGCTTTGTCTTCACC
CGACACAGTCAAACCACAGCAATTCCTTCATGTCCAGAGGGGACAGTGCCACTCTACAGTGGGTTTTCT
TTTCTTTTTGTACAAGGAAATCAACGAGCCCACGGACAAGACCTTGGAACTCTTGGCAGCTGCCTGCAG
CGATTTACCACAATGCCATTCTTATTCTGCAATGTCAATGATGTATGTAATTTTGCATCTCGAAATGAT
TATTCATACTGGCTGTCAACACCAGCTCTGATGCCAATGAACATGGCTCCCATTACTGGCAGAGCCCTT
GAGCCTTATATAAGCAGATGCACTGTTTGTGAAGGTCCTGCGATCGCCATAGCCGTTCACAGCCAAACC
ACTGACATTCCTCCATGTCCTCACGGCTGGATTTCTCTCTGGAAAGGATTTTCATTCATCATGTTCACA
AGTGCAGGTTCTGAGGGCACCGGGCAAGCACTGGCCTCCCCTGGCTCCTGCCTGGAAGAATTCCGAGCC
AGCCCATTTCTAGAATGTCATGGAAGAGGAACGTGCAACTACTATTCAAATTCCTACAGTTTCTGGCTG
GCTTCATTAAACCCAGAAAGAATGTTCAGAAAGCCTATTCCATCAACTGTGAAAGCTGGGGAATTAGAA
AAAATAATAAGTCGCTGTCAGGTGTGCATGAAGAAAAGACACTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	AscI-MluI
ACCN:	NM_000091
Insert Size:	5013 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_000091.4
RefSeq Size:	8114 bp
RefSeq ORF:	5013 bp
Locus ID:	1285
UniProt ID:	Q01955
Cytogenetics:	2q36.3
Protein Families:	Druggable Genome
MW:	161.8 kDa

Gene Summary: Type IV collagen, the major structural component of basement membranes, is a multimeric protein composed of 3 alpha subunits. These subunits are encoded by 6 different genes, alpha 1 through alpha 6, each of which can form a triple helix structure with 2 other subunits to form type IV collagen. This gene encodes alpha 3. In the Goodpasture syndrome, autoantibodies bind to the collagen molecules in the basement membranes of alveoli and glomeruli. The epitopes that elicit these autoantibodies are localized largely to the non-collagenous C-terminal domain of the protein. A specific kinase phosphorylates amino acids in this same C-terminal region and the expression of this kinase is upregulated during pathogenesis. This gene is also linked to an autosomal recessive form of Alport syndrome. The mutations contributing to this syndrome are also located within the exons that encode this C-terminal region. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head conformation with another type IV collagen gene so that each gene pair shares a common promoter. [provided by RefSeq, Jun 2010]
Transcript Variant: This variant (1) represents the longest transcript and encodes isoform 1.