

## Product datasheet

# Recombinant Mouse Collagen III protein ab196093

### Description

<b>Product name</b>	Recombinant Mouse Collagen III protein	
<b>Purity</b>	> 95 % SDS-PAGE. Purity greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.	
<b>Endotoxin level</b>	< 1.000 Eu/μg	
<b>Expression system</b>	HEK 293 cells	
<b>Accession</b>	<a href="#">P08121</a>	
<b>Protein length</b>	Full length protein	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Mouse	
<b>Sequence</b>	<p>           QFDSYDVKSGVGGMGGYPGAGPPGPPGPPGSSGHPG            SPGSPGYQGPPGE            PGQAGPAGPPGPPGALGPAGPAGKDGESGRPGRPGER            GLPGPPGIKGPAG            MPGFPGMKGHRGFDGRNGEKGETGAPGLKGENGLPGD            NGAPGPMGPRGAP            GERGRPGLPGAAGARGNDGARGSDGQPPPGPPGTAG            FPGSPGAKGEVGP            AGSPGSNGSPGQRGEPGPQGHAGAQQPPGPPGNNGSP            GKGEMGPAGIPG            APGLIGARGPPGAGTNGIPGTRGPSGEPGKNGAKGEPG            ARGERGEAGSP            GIPGPKGEDGKDGSPEPGANGLPGAAGERGPSGFRGP            AGPNGIPGEKGP            PGERGGPGPAGPRGVAGEPGRDGTGGPGIRGMPGSP            GPGNDGKPGPPG            SQGESGRPGPPGPSGPRGQPGVMGFPGPKGNDGAPGK            NGERGGPGGPGLP            GPAGKNGETGPQGGPTGPAGDKGDSGPPGPQGLQGI            PGTGGPPGENGK            PGEPGPKGEVGAAPGAGGKGDGAPGERGPPGTAGIPG            ARGGAGPPGPEG            GKGPAGPPGPPGASGSPGLQGMPGERGGPGSPGPKGE            KGEPGGAGADGVP            GKDGPRGPAGPIGPPGPAGQPGDKGEGGSPGLPGIAGP         </p>	

RGGPGERGEHGP  
 PGPAGFPAGPGQNGEPGAKGERGAPGEKGEKGGPPGPA  
 GPTGSSGPAGPPG  
 PQGVKGERGSPGGPGTAGFPGGRLPGPPGNNGNPGP  
 PGPSGAPGKDGGP  
 GPAGNSGSPGNPGIAGPKGDAGQPGEKGGPPGAQGGPPG  
 SPGPLGIAGLTGA  
 RGLAGPPGMPGPRGSPGPQGIKGESGKPGASGHNGERG  
 PPGPQGLPGQPG  
 TAGEPGRDGNPGSDGQGRDGGSPGGKGDRENGSPGA  
 PGAPGHPGPPGPV  
 GPSGKSGDRGETGPAGPSGAPGPAGARGAPGPQGPRG  
 DKGETGERGSNGI  
 KGHRGFPGNPGPPGSPGAAGHQGAIGSPGPAGPRGPVG  
 PHGPPGKDGTS  
 HPGPIGPPGPRGNRGERGSEGSPGHPGQPGPPGPPGAP  
 GPCCGGGAAAIA GVGGEKSGGFSPYYGVDHHHHHH

<b>Predicted molecular weight</b>	97 kDa including tags
<b>Amino acids</b>	155 to 1219
<b>Tags</b>	His tag C-Terminus
<b>Additional sequence information</b>	This product is the mature full length protein from aa 155 to 1219. The signal peptide and propeptides are not included.

## Specifications

Our [Abpromise guarantee](#) covers the use of **ab196093** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE HPLC
<b>Form</b>	Liquid

## Preparation and Storage

<b>Stability and Storage</b>	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 4.50 Constituents: 0.87% Sodium chloride, 0.16% Sodium acetate
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## General Info

<b>Function</b>	Collagen type III occurs in most soft connective tissues along with type I collagen.
<b>Involvement in disease</b>	Defects in COL3A1 are a cause of Ehlers-Danlos syndrome type 3 (EDS3) [MIM:130020]; also known as benign hypermobility syndrome. EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS3 is a form of Ehlers-Danlos syndrome characterized by marked joint hyperextensibility without skeletal deformity. Defects in COL3A1 are the cause of Ehlers-Danlos syndrome type 4 (EDS4) [MIM:130050]. EDS

is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS4 is the most severe form of the disease. It is characterized by the joint and dermal manifestations as in other forms of the syndrome, characteristic facial features (acrogeria) in most patients, and by proneness to spontaneous rupture of bowel and large arteries. The vascular complications may affect all anatomical areas. Defects in COL3A1 are a cause of susceptibility to aortic aneurysm abdominal (AAA) [MIM:100070]. AAA is a common multifactorial disorder characterized by permanent dilation of the abdominal aorta, usually due to degenerative changes in the aortic wall. Histologically, AAA is characterized by signs of chronic inflammation, destructive remodeling of the extracellular matrix, and depletion of vascular smooth muscle cells.

#### **Sequence similarities**

Belongs to the fibrillar collagen family.  
Contains 1 fibrillar collagen NC1 domain.  
Contains 1 VWFC domain.

#### **Post-translational modifications**

Proline residues at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.  
O-linked glycan consists of a Glc-Gal disaccharide bound to the oxygen atom of a post-translationally added hydroxyl group.

#### **Cellular localization**

Secreted > extracellular space > extracellular matrix.

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**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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