

## Recombinant Mouse Collagen $\alpha$ -1(III) Chain/COL3A1 Protein (His Tag)

Catalog No. PKSM040988

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

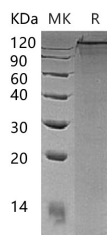
### Description

<b>Synonyms</b>	Collagen alpha-1(III) chain;Col3a1
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Gln155-Gly1219
<b>Accession</b>	P08121
<b>Calculated Molecular Weight</b>	96.6 kDa
<b>Observed molecular weight</b>	130 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as a 0.2 $\mu$ m filtered solution of 20mM HAc-NaAc, 150mM NaCl, pH 4.5.
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Collagen alpha-1(III) chain (Col3a1) is a secreted protein and belongs to the fibrillar collagen family. It contains 1 fibrillar collagen NC1 domain and 1 VWFC domain. Collagen alpha-1(III) chain is a fibrillar collagen that is found in extensible connective tissues such as skin, lung, and the vascular system, frequently in association with type I collagen. The COL3A1 gene produces the components of type III collagen, called pro-alpha1(III) chains. Three copies of this chain combine to make a molecule of type III procollagen. These triple-stranded, rope-like procollagen molecules must be processed by enzymes outside the cell to remove extra protein segments from their ends. Once these molecules are processed, the

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collagen molecules arrange themselves into long, thin fibrils. Within these fibrils, the individual collagen molecules are cross-linked to one another. These cross-links result in the formation of very strong mature type III collagen fibrils, which are found in the spaces around cells.