

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

**Catalog Number:** PKSM040988

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

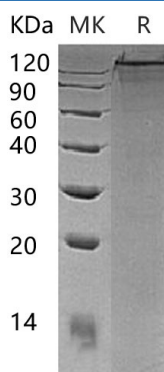
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse Collagen $\alpha$ -1 Chain/COL3A1 protein Gln155-Gly1219, with an C-terminal His
<b>Calculated MW</b>	96.6 kDa
<b>Observed MW</b>	130 kDa
<b>Accession</b>	P08121
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<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.

### 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 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.

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