



Recombinant Protein Technical Manual
Recombinant Mouse Collagen α (III) Chain/COL3A1
Protein (His Tag)
RPES0122

Product Data:

Product SKU: RPES0122

Size: 10 μ g

Species: Mouse

Expression host: Human Cells

Uniprot: P08121

Protein Information:

Molecular Mass: 96.6 kDa

AP Molecular Mass: 130 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per μ g as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: 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.

Formulation: Supplied as a 0.2 μ m filtered solution of 20mM HAc-NaAc, 150mM NaCl, pH4.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Collagen alpha(III) chain; Col3a1

Immunogen Information:

Sequence: Gln155-Gly1219

Background:

Collagen alpha(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(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.