

BA144**Rat Collagen type I (native)****Alternate names:**

Alpha-1 type I collagen, Alpha-2 type I collagen, COL1A1, COL1A2

Quantity:

10 mg

Background:

Collagens are highly conserved throughout evolution and are characterised by an uninterrupted "Glycine X Y" triplet repeat that is a necessary part of the triple helical structure. Type I collagen (95 kDa) is found in bone, cornea, skin and tendon. Mutations in the encoding gene are associated with osteogenesis imperfecta, Ehlers Danlos syndrome, and idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for Platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor.

Uniprot ID:[P02454](#)**NCBI:**[NP_445756.1](#)**GeneID:**[29393](#)**Species:**

Rat

Source:

Tail, (Rat tail tendon)

Format:**State:** Lyophilized purified protein, essentially salt free**Purity:** >90% pure by SDS-PAGE.**Preparation:** Collagen was extracted from washed dissected tissue into dilute acetic acid after pepsin treatment.**Purification:** Differential Salt Precipitation.

Rat Collagen type III 10%

Rat collagen (other types) < 1%

Non-collagen proteins < 0.5%

Preservatives: None**Stabilizers:** None**Reconstitution:** Restore in ice cold 0.5 M Acetic Acid, pH 2.5. Solubility 10 mg/ml.**Applications:****ELISA.**

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description:

Protein from rat tail tendon.

Storage:

Store at -20°C only.

DO NOT FREEZE after reconstitution.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:1. Miller, E. J. and Gay, S. (1982) Collagen: an overview. *Methods Enzymol.* 82: 3-32.