

Product Information

Product SKU:	RPCB1108	Gene ID:	1277	Size:	10µg
Tag:	C-His	Reactivity:	Human		

Additional Information

Expression Host:	HEK293 cells	Swissprot:	P02452
Purity:	-		

Protein Information

Background: Type I collagen is the most abundant structural protein of connective tissues such as skin, bone and tendon. It is synthesized as a procollagen molecule which is characterized by a 300 nm triple helical domain flanked by globular N- and C-terminal propeptides. The triple helical domain contains Gly-Xaa-Yaa triplets where Xaa and Yaa are frequently proline and hydroxyproline, respectively. The non-helical propeptides are removed by procollagen N- and C-proteinase activities so that the mature triple helices can self-assemble into collagen fibrils that provide tensile strength to tissues. Type I collagen is a heterotrimer that consists of two alpha 1(I) chains and one alpha 2(I) chain, although homotrimers consisting of three identical alpha 1(I) chains have also been described. This recombinant mini pro-alpha 1(I) collagen consists of a shortened alpha 1(I) chain with following domain structure from N- to C-terminus: N-propeptide, N-telopeptide, the 33 most N-terminal Gly-Xaa-Yaa repeats, the 33 most C-terminal Gly-Xaa-Yaa repeats, C-telopeptide and C-propeptide. The preparation contains a mixture of the full-length molecule, pN collagen I(alpha 1) and the C-terminal propeptide. This truncated pro-alpha 1(I) collagen is a substrate for procollagen N-proteinase and procollagen C-proteinase.

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Human Collagen I alpha 1/COL1A1 Protein, tested reactivity in HEK293 cells and has been validated in SDS-PAGE. 100% guaranteed.

Endotoxin: < 0.1 EU/μg

Formulation: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Storage: Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.