Human PⅠNP Antibody Pair SetSet

Catalog No. E-KAB-0160 **Applications** ELISA

Synonyms P1NP, N-Propeptide Of Type I Procollagen, Procollagen I Amino Terminal Propeptide

Kit components & Storage

Title	Specifications	Storage
Human PⅠNP Capture Antibody	1 vial, 100 μg	Store at -20℃. Avoid freeze/thaw cycles.
Human PⅠNP Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20℃. Avoid freeze/thaw cycles.

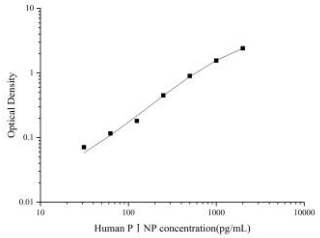
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0160)	
		Human PⅠNP Capture Antibody	Human PⅠNP Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human PⅠNP protein	Recombinant Human PⅠNP protein
	Swissprot	P02452	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5 mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300; 1% protective protein; 50% glycerol; pH 7.4
	Purify	Protein A	Protein A
	Specificity	Detects Human PⅠNP in ELISAs.	

Applications

Human PⅠNP Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4 μg/mL	Human PⅠNP Capture Antibody	
ELISA Detection	1:1000-1:10000	Human PⅠNP Detection Antibody (Biotin)	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

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 (1). 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 (1). 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 (2). 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.