

Human Procollagen type 1 N-terminal propeptide (P1NP) ELISA Kit | P1NP elisa kit

Human Procollagen type 1 N-terminal propeptide (P1NP) Immunoassay Kit

CATALOG #
AAA60561

REACTIVITY
Human

PRODUCT SYNONYMS

Procollagen type 1 N-terminal propeptide (P1NP); Human Procollagen type 1 N-terminal propeptide (P1NP) Immunoassay Kit; Human procollagen type 1 N terminal propeptide (P1NP); P1NP elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Assay Type	Quantitative Sandwich
Samples	Serum and plasma samples
Sensitivity	62.5 pg/ml
Intra-assay Precision	<3.3%
Inter-assay Precision	<5.1%

ADDITIONAL INFORMATION

Related Product Information for P1NP elisa kit	Background: In bone, collagen type I is synthesized by osteoblasts in the form of procollagen. This precursor contains a short signal sequence and terminal extension peptides: amino-terminal propeptide (PINP) and carboxy-terminal propeptide. These propeptide extensions are removed by specific proteinases before the collagen molecules form. Both propeptides can be found in the circulation and their concentration reflects the synthesis rate of collagen type I [1] [2]. Principle of the Assay: This assay is a quantitative sandwich ELISA. The immunoplate is precoated with a monoclonal antibody specific for human P1NP. Standards and samples are pipetted into the wells and any human P1NP present is bound by the immobilized antibody. After washing away any unbound substances, a biotin labelled polyclonal antibody specific for human P1NP is added to the wells. After wash step to remove any unbound reagents, streptavidinHRP conjugate (STP-HRP) is added. After the last wash step, an HRP substrate solution is added and colour develops in proportion to the amount of human P1NP bound initially. The assay is stopped and the optical density of the wells determined using a microplate reader. Since the increases in absorbance are directly proportional to the amount of captured human P1NP, the unknown sample concentration can be interpolated from a reference curve included in each assay. Intended Uses: This human P1NP ELISA kit is designed for quantification of human P1NP in serum, plasma and cell culture supernate samples.
References	[1] Patrick R. L., et al. (2012) Cold Spring Harb Perspect Med 2: a 00627. [2] Morikawa N., et al. (2019) Int Heart J 20;60(2):310-317.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/procollagen-type-1-n-terminal-propeptide-p1np/60561>