Human Procollagen I N-terminal peptide (PINP) ELISA Kit

Catalog No: #EK8698

Package Size: #EK8698-1 48T #EK8698-2 96T

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Description

Product Name	Human Procollagen I N-terminal peptide (PINP) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:2.47-200 ng/mL

Sensitivity:0.91 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PINP in samples. An antibody specific for PINP has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPINP present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PINP is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PINP bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The PINP molecule is similar to PIIINP consisting of three distinct structural domains: Col 1 is on the aminoterminal side of the molecule, while Col 2 and Col 3 are situated on the middle of the helically structured molecule (Khn et al. 1982). The PINP molecule has a molecular mass of 35 000 and is cleared by scavenger receptors in liver endothelial cells (Melkko et al. 1994). PINP often occurs in circulation in two forms of different molecular sizes. One is identical to the trimeric authentic antigen (intact PINP) whereas the other consists of smaller forms of PINP, resembling a single domain of the proα1(I) chain of PINP and is probably a degradation product of type I procollagen or I pN-collagen. Thus, an assay of intact PINP rather than total PINP appears to be more sensitive in detecting changes in the rate of type I collagen synthesis (Melkko et al. 1996, Risteli & Risteli 1999).

Note: This product is for in vitro research use only