

CPA639Hu01 10µg

Composite Cross Linked N-Telopeptide Of Type I Collagen (NTXI)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

9th Edition (Revised in Jul, 2013)

[PROPERTIES]

Residues: Synthetic Peptide

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Formulation: Supplied as solution form in 50% glycerol.

Concentration: 200µg/mL

Predicted isoelectric point: 4.4

Predicted Molecular Mass: 1800.9Da

Applications: SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

[RELEVANCE]

In bone physiology, the N-terminal telopeptide (Cross Linked N-Telopeptide Of Type I Collagen) is a biomarker used to measure the rate of bone turnover. NTX can be measured in the urine or serum. Evaluating an individual's rate of bone turnover, termed bone remodeling, directly may be important in assessing his or her potential nonsurgical treatment response as well as evaluating his or her risk of developing complications during healing following surgical intervention. NTX is one of such biomarker to determine an individual's rate of bone turnover. However, while NTX does fluctuate in a very sensitive manner in line with bone resorption patterns, they are not very specific, in that they may vary spontaneously without physiologic intervention.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCES]

The synthetic peptide's sequence is listed below.

QLSYGYDEKSTGGISVP

[REFERENCES]

1. Iba, Kousuke., *et al.* (2008) Journal of Orthopaedic Science 13 (5): 438 – 441.
2. Rosen, HN., *et al.* (2000) Calcified tissue international 66 (2): 100–3.
3. Rosen, HN., *et al.* (1998) Calcified tissue international 63 (5): 363–8.