ANTIBODYSHOP®

PRODUCT SPECIFICATION
04/01/2012

Anti-Procollagen type IIA N-terminal propeptide (human, PIIANP) Mouse monoclonal antibody

PRODUCT NO.

BTE 003-02

Subclass: IgG_1/k

Clone: NA

PRESENTATION

Preparation: Protein-A/G purified
Content: Available in 200 µL and 1 mL size.1 mg/mL +/- 15%. See Certificate of Analysis for details.
Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide
Storage: 4-8ºC without exposure to light. No precautions necessary during handling.

ANTIGEN

Collagen type II is the most abundant protein of cartilage matrix. Two isoforms exist and collagen type IIA is involved in early development of cartilage in embryos. The collagen is produced from type II procollagen when two teloterminal propeptides are digested from the procursor and released into the circulation. Procollagen type II N-terminal propeptide (PIIANP) is considered a marker of cartilage synthesis and the normal concentration in serum is approximately 30ng/mL (1).

IMMUNOGEN

Recombinant expressed PIIANP

SPECIFICITY

BTE 003-02 is specific for human PIIANP

EPITOPE SPECIFICITY

Epitope is located at the amino-terminal part of procollagen type IIA

REACTIVITY

BTE 003-02 diluted in 10%FCS/TBS is well suited for immunohistochemistry on formalin-fixed, paraffin-embedded fetal tissue.
BTE 003-02 also reacts with recombinant PIIANP coated directly onto the microtiter well.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

IMMUNIZATION

Female BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	
Immunoblotting	Not determined	
Immunohistochemistry	Yes	

REFERENCES

1. Garnero P, Ayral X, Rousseau JC, Christgau S, Sandell LJ, Dougados M, Delmas PD (2002) Uncoupling of type II collagen synthesis and degradation predicts progression of joint damage in patients with knee osteoarthritis. Arthritis Rheum 46:2613-24.
2. Zhu Y, McAlinden A, Sandell LJ. Type IIA procollagen in development of the human intervertebral disc: regulated expression of the NH(2)-propeptide by enzymic processing reveals a unique developmental pathway. Dev Dyn 220:350-62.
3. McAlinden A, Zhu Y, Sandell LJ (2001) Expression of type II procollagens during development of the human intervertebral disc. Biochem Soc Trans 30:831-8.

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