

# Product specification ANTIBODY

2024-04-29

## Anti-h PINP 11501 SPTN-5

#### **Product overview**

Catalog number 100784

**Specificity** Antibody recognizes intact form of human procollagen I N-terminal peptide

**Description** Monoclonal mouse antibody, cultured *in vitro* under conditions free from

animal-derived components.

Product buffer solution 50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN<sub>3</sub> as a preservative

Shelf life and storage 36 months from manufacturing at 2–8 °C

Subclass IgG<sub>1</sub>

Analyte description Amino-terminal propeptide of type I procollagen (PINP) is released into

blood circulation during bone formation. PINP is used as a bone turnover marker for the assessment of fracture risk and monitoring of osteoporosis treatment. PINP is recommended as reference bone formation marker by

IOF and IFCC1.

### Parameters tested on each lot

Product appearance Liquid, may turn slightly opaque during storage

Product concentration 5.0 mg/ml (+/-10 %)

**Immunoreactivity** 80–120 % compared to the reference sample in an FIA test

**IEF Profile** 6.4–7.1

**Purity**  $\geq 95\%$ 

Kinetic parameters

**Association rate constant** 4.5 x 10<sup>5</sup> 1/Ms

**Dissociation rate constant** 6.4 x 10<sup>-5</sup> 1/s

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**Affinity constant**  $K_A = 7.0 \times 10^9 \text{ 1/M}; K_D = 1.2 \times 10^{-10} \text{ M} (= 0.12 \text{ nM})$ 

**Determination method** BLI (Octet RED96e)

**Determination antigen**Recombinant Procollagen I N-Terminal Propeptide (Cloud-Clone, Cat.

RPA957Hu01)





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Cross-reactivities N/D

Epitope N/D

Pair recommendations

		DETECTION	
		11501	11502
CAPTURE	11501	-	+
	11502	+	-

Following pairs are especially recommended for the below mentioned assays:

CLIA: 11501 (capture) - 11502 (detection)

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

Platforms tested FIA, CLIA

Antigens tested N/D

Product stability TEMPERATURE, TIME RESULT

-70 °C, 21 days OK
-20 °C, 21 days OK
+4 °C, 21 days OK
+35 °C, 21 days OK
+45 °C, 7 days OK

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.

Miscellaneous Antibodies 11501 and 11502 detect specifically trimeric intact form of

PINP. Serum concentration of intact PINP is not influenced by impaired

kidney function<sup>2</sup>.

References <sup>1</sup>Vasikaran S, Eastell R, Bruyére O et al. (2011). Markers of bone turnover

for the prediction of fracture risk and monitoring of osteoporosis treatment: a need for international reference standards. Osteoporos Int 22:391-420.

<sup>2</sup>Koivula MK, Risteli L and Risteli J (2012). Measurement of aminoterminal propeptide of type I procollagen (PINP) in serum. Clin Biochem 45:920-

927.

