Medix Biochemica

Product specification
ANTIBODY
2024-04-29

Anti-h PINP 11502 SPTN-5

Product overview

Catalog number	100785
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_3 as a preservative
Shelf life and storage	18 months from manufacturing at 2–8 °C
Subclass	IgG_1
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 IFCC[1].

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	6.5–7.5
Purity	≥ 95 %

Kinetic parameters

Association rate constant	6.5×10^5 1/Ms
Dissociation rate constant	8.2×10^{-5} 1/s
Affinity constant	$K_A = 7.9 \times 10^9$ 1/M; $K_D = 1.4 \times 10^{-10}$ M (= 0.14 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, 7 days	OK
+35 °C, 21 days	Reduced immunoreactivity, charge alterations
+45 °C, 3 days	Reduced immunoreactivity
+45 °C, 7 days	Reduced immunoreactivity, charge alterations

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[2].

References

[1]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.

[2]Koivula MK, Risteli L and Risteli J (2012). Measurement of aminoterminal propeptide of type I procollagen (PINP) in serum. Clin Biochem 45:920-927.

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