# Medix Biochemica

### Anti-h NT-proBNP 1309 SPTN-5

Product overview				
Catalog number	100710			
Specificity	Antibody recognizes human N-terminal pro-B-type natriuretic peptide			
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> 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	36 months from manufacturing at 2–8 °C			
Subclass	lgG₁			
Analyte description	The plasma concentrations of both the N-terminal fragment of Pro-B-type natriuretic peptide (NT-proBNP) and prohormone of brain natriuretic peptide (proBNP) are significantly increased in patients with asymptomatic and symptomatic left ventricular dysfunction.			
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	5.9–6.5			
Purity	≥ 95 %			

Kinetic parameters	
Association rate constant	9.5 x 10 <sup>5</sup> 1/Ms
Dissociation rate constant	1.4 x 10 <sup>-4</sup> 1/s
Affinity constant	$K_A = 6.6 \text{ x } 10^9 \text{ 1/M}; K_D = 2.1 \text{ x } 10^{-10} \text{ M} (= 0.21 \text{ nM})$
Determination method	BLI (Octet RED96e)
Determination antigen	Recombinant NT-proBNP, Medix Biochemica (Cat 610090)



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### **Cross-reactivities**

Does not recognize canine NT-proBNP (HyTest, 8CNT9).

Amino acids 59-70 (EGIRGHRKMVLY)

Epitope

### **Pair recommendations**

		DETECTION						
		1306/ RC1306	1307/ RC1307	1308	1309	1310	1311	1312
RE	1306 / RC1306	-	+	-	+	+	+	+
	1307/ RC1307	+	-	+	+	+	+	+
CAPTURE	1308	-	+	-	+	+	+	+
CAF	1309	+	+	+	-	-	-	-
	1310	+	+	+	-	-	-	-
	1311	+	+	+	-	-	-	-
	1312	+	+	+	-	-	-	-

Following pairs are especially recommended for the below mentioned assays:

CLIA: 1306 (capture) – 1309 (detection), 1306 – 1311, 1306 – 1312, 1308 - 1309, 1308 - 1310, 1308 - 1311 and 1308 - 1312

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** 

Antigens tested

FIA, LF, CLIA

Recombinant NT-proBNP antigen, Medix Biochemica 610090 and recombinant proBNP antigen Medix Biochemica 710017, 710042 and 710043.

Product stability	TEMPERATURE, TIME	RESULT
2	-70 °C, 21 days	OK
	-20 °C, 21 days	OK
	+4 °C, 21 days	OK
	+35 °C, 21 days	OK
	+45 °C, 3 days	OK
	+45 °C, 7 days	Minor 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	
References	



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