# Medix Biochemica

## Anti-h NT-proBNP RC1306 SPTN-5

Product overview						
Catalog number	140010					
Specificity	Antibody recognizes human N-terminal pro-B-type natriuretic peptide					
Description	Recombinant chimeric antibody containing variable region from mouse IgG and constant region from human IgG <sub>1</sub> , 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	Unspecified, storage 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 %) (A280 nm, 1 mg/ml, 1 cm = 1.6)					
Immunoreactivity	80–120 % compared to the reference sample in an FIA test					
IEF Profile	8.1–8.9					
Purity	≥ 95 %					
Kinetic parameters						
Association rate constant	2.3 x 10 <sup>5</sup> 1/Ms					
Dissociation rate constant	4.7 x 10 <sup>-4</sup> 1/s					
Affinity constant	K <sub>A</sub> = 4.9 x 10 <sup>8</sup> 1/M; K <sub>D</sub> = 3.9 x 10 <sup>-9</sup> M (= 3.9 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).

Epitope

### Amino acids 12-28 (LETSGLQEQRNHLQGKL)

Pair

recomm	enda	ations
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HM146   -   -   -   + <td></td> <td></td> <td>1312</td> <td>+</td> <td>+</td> <td>+</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>			1312	+	+	+	-	-	-	-	-	-	-
Following pairs are especially recommended for the below mentioned assays: CLIA: 1306 (capture) – 1309 (detection), 1306 – 1311, 1306 – 1312, 1308 – 1309, 1 – 1310, 1308 – 1311 and 1308 – 1312 LF: 1306 (capture) – 1309 (detection), 1306 – 1310 FIA: 1306 (capture) – 1310 (detection), 1306 – 1312, 1309 – 1307, 1310 – HM210,			HM071	-	-	-	+	-	+	-	-	-	-
CLIA: 1306 (capture) – 1309 (detection), 1306 – 1311, 1306 – 1312, 1308 – 1309, 1 – 1310, 1308 – 1311 and 1308 – 1312 LF: 1306 (capture) – 1309 (detection), 1306 – 1310 FIA: 1306 (capture) – 1310 (detection), 1306 – 1312, 1309 – 1307, 1310 – HM210,			HM146	-	-	-	-	+	+	+	-	+	-
Please note that pair recommendations are based on results obtained by our labora Equally good results may be obtained using other pairs and therefore these													

Platforms tested FIA, LF, CLIA

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

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**

References



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