

2024-06-16

# Anti-h NT-proBNP RC1307 SPTN-5

#### **Product overview**

Catalog number 140011

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 *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 Unspecified, storage at 2–8 °C

Subclass Human IgG<sub>1</sub>

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 = 1.4)

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

IEF Profile 8.0–9.4

**Purity** ≥ 95 %

### Kinetic parameters

**Association rate constant** 1.2 x 10<sup>6</sup> 1/Ms

**Dissociation rate constant** 2.3 x 10<sup>-4</sup> 1/s

**Affinity constant**  $K_A = 5.2 \times 10^9 \text{ 1/M}; K_D = 2.3 \times 10^{-10} \text{ M} (= 0.23 \text{ nM})$ 

**Determination method** BLI (Octet RED96e)

**Determination antigen** Recombinant NT-proBNP, Medix Biochemica (Cat 610090)





## Product specification ANTIBODY

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

**Epitope** Amino acids 1-17 (HPLGSPGSASDLETSGL)

Pair

recommendations

		DETECTION									
		1306/ RC1306	1307/ RC1307	1308	1309	1310	1311	1312	HM071	HM148	HM210
CAPTURE	1306 / RC1306	-	+	-	+	+	+	+	-	-	-
	1307/ RC1307	+	-	+	+	+	+	+	-	+	-
	1308	-	+	-	+	+	+	+	-	-	-
	1309	+	+	+	-	-	-	-	-	-	-
	1310	+	+	+	-	-	-	-	+	-	+
	1311	+	+	+	-	-	-	-	-	-	-
	1312	+	+	+	-	-	-	-	-	-	-
	HM071	-	-	-	+	-	+	-	-	-	-
	HM146	-	-	-	-	+	+	+	-	+	-

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

LF: 1306 (capture) - 1309 (detection), 1306 - 1310

FIA: 1306 (capture) – 1310 (detection), 1306 – 1312, 1309 – 1307, 1310 – HM210,

HM071 - 1309, 1310 - HM071, 1307 - 1311

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, 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

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 -

