

Anti-h NT-proBNP 1306 SPTN-5

Product overview

Catalog number	100521
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	18 months from manufacturing at 2–8 °C
Subclass	IgG ₁
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	6.3–7.3
Purity	≥ 95 %

Kinetic parameters

Association rate constant	7.45 x 10 ⁵ 1/Ms	5.1 x 10 ⁵ 1/Ms
Dissociation rate constant	1.70 x 10 ⁻⁴ 1/s	5.5 x 10 ⁻⁴ 1/s
Affinity constant	K _A = 4.4 x 10 ⁹ 1/M K _D = 2.3 x 10 ⁻¹⁰ M (= 0.23 nM)	K _A = 9.2 x 10 ⁸ 1/M K _D = 1.7 x 10 ⁻⁹ M (= 1.7 nM)
Determination method	SPR-analysis (ProteOn XPR36)	BLI (Octet RED96e)
Determination antigen	NT-proBNP, HyTest (Cat 8NT2, Lot 14/07-8NT2)	Recombinant NT-proBNP, Medix Biochemica (Cat 610090)



Legal disclaimer

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

Epitope Amino acids 12-28 (LETSGLQEQRNHLQGKL)

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
	-20 °C, 21 days	OK
	+4 °C, 21 days	OK
	+35 °C, 7 days	OK
	+35 °C, 21 days	Minor charge alterations
	+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 -

