

2024-10-22

Anti-h cTnT 3712 SPTN-5

Product overview

Catalog number 100699

Specificity Antibody recognizes human cardiac troponin T (cTnT)

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 % NaN₃ as a preservative

Shelf life and storage 36 months from manufacturing at 2–8 °C

 $\begin{tabular}{l} Subclass & IgG_1 \end{tabular}$

Analyte description Troponins form a complex of three regulatory proteins (troponin C, I and T)

that are integral to muscle contraction in skeletal and cardiac muscles. Serum cardiac troponin tests can be used to help diagnose several

different heart disorders, especially myocardial infarction.

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 6.5–7.0

Purity ≥ 95 %

Kinetic parameters

Association rate constant 1.5 x 10⁵ 1/Ms

Dissociation rate constant 1.3 x 10⁻⁴ 1/s

Affinity constant $K_A = 1.1 \times 10^9 \text{ 1/M}; K_D = 1.2 \times 10^{-9} \text{ M} (= 1.18 \text{ nM})$

Determination method BLI (Octet RED96e)

Determination antigen Recombinant cTnT, Medix Biochemica (Cat 610101)





Product specification ANTIBODY

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Cross-reactivities

Does not recognize skeletal troponin T (sTnT) or cardiac troponin I (cTnI).

Epitope

Amino acids 139-152 (RIRNEREKERQNRL) of cardiac troponin T isoform 6.

Pair recommendations

			DETECTION				
		3701	3703	3708	3710	3711	3712
CAPTURE	3701	-	-	-	-	-	-
	3703	-	-	-	+	+	+
	3708	+	+	-	+	+	+
	3710	-	+	+	-	-	-
	3711	-	+	-	-	-	-
	3712	-	+	+	-	-	-

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

Antigens tested

Recombinant cardiac troponin T antigen, Medix Biochemica 610101, native cardiac troponin T antigen, Medix Biochemica 550-21 and LA149.

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 cho

Minor charge alterations +35 °C, 21 days +45 °C, 3 days Minor charge alterations +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