

# Product specification ANTIBODY

2024-04-30

### Anti-h cTnT 3710 SPTN-5

#### **Product overview**

Catalog number 100698

**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 % NaN<sub>3</sub> as a preservative

**Shelf life and storage** Unspecified, storage 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** 1.6 x 10<sup>5</sup> 1/Ms

**Dissociation rate constant** 1.6 x 10<sup>-4</sup> 1/s

**Affinity constant**  $K_A = 9.8 \times 10^8 \text{ 1/M}; K_D = 1.2 \times 10^{-9} \text{ M} (= 1.23 \text{ nM})$ 

**Determination method** BLI (Octet RED96e)

**Determination antigen** Recombinant cTnT, Medix Biochemica (Cat 610101)





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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					CTION		
		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 and native cardiac troponin T antigen, Medix Biochemica 550-21.

**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** 

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References