

## Anti-h cTnI RC9701 SPTN-5

### Product overview

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<b>Catalog number</b>	140000
<b>Specificity</b>	Antibody recognizes human cardiac troponin I (cTnI)
<b>Description</b>	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.
<b>Product buffer solution</b>	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>Shelf life and storage</b>	Unspecified, storage at 2–8 °C
<b>Subclass</b>	human IgG <sub>1</sub>
<b>Analyte description</b>	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

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<b>Product appearance</b>	Liquid, may turn slightly opaque during storage
<b>Product concentration</b>	5.0 mg/ml (+/- 10 %) (A280 nm, 1 mg/ml, 1 cm = 1.3)
<b>Immunoreactivity</b>	80–120 % compared to the reference sample in an FIA test
<b>IEF Profile</b>	7.5–8.8
<b>Purity</b>	≥ 95 %

### Kinetic parameters

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<b>Association rate constant</b>	$2.5 \times 10^5$ 1/Ms
<b>Dissociation rate constant</b>	$3.3 \times 10^{-4}$ 1/s
<b>Affinity constant</b>	$K_A = 7.8 \times 10^8$ 1/M; $K_D = 1.3 \times 10^{-9}$ M (= 1.3 nM)
<b>Determination method</b>	BLI (Octet RED96e)
<b>Determination antigen</b>	Troponin ITC complex, EastCoast Bio LA200

**Legal disclaimer**

**Cross-reactivities** Does not recognize skeletal troponin I (sTnI).

**Epitope** In the stable part of the cTnI molecule (residues 85-95)

**Pair recommendations**

		DETECTION				
		9701/ RC9701	9703	9705	9707/ RC9707	RC9750
CAPTURE	9701/ RC9701	-	+	+	+	+
	9703	-	-	+	-	-
	9705	+	+	-	+	+
	9707/ RC9707	-	-	-	-	-
	RC9750	+	-	+	+	-

RC9750 is recommended as a very sensitive capture.

For increased sensitivity, 2+1 or 2+2 antibody approach is recommended, for example capture: 9701/RC9701 & 9705, detection 9703 & 9707/RC9707.

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 cTnI antigen, Medix Biochemica 610102, native cTnI antigen Lee Biosolutions 550-11, native cardiac Troponin Complex (cTn ITC) antigen, Lee Biosolutions 550-08.

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** -



**Legal disclaimer**