

Human Cardiac Troponin T ELISA Kit ab223860

リコンビナント SimpleStep ELISA

1 References 画像数 4

製品の概要

製品名	Human Cardiac Troponin T ELISA Kit				
検出方法	Colorimetric				
再現性	Intra-Assay (同時再現性)				
	サンプル	N	平均値	SD	CV%
	Serum	8			4.82%
	Inter-Assay (日差再現性)				
	サンプル	N	平均値	SD	CV%
	Serum	3			1.96%
サンプルの種類	Serum, Cell culture media				
アッセイタイプ	Sandwich (quantitative)				
検出感度	68.2 pg/ml				
検出範囲	195.3 pg/ml - 12500 pg/ml				
添加回収試験	特定サンプルでの回収試験				
	サンプルの種類	平均 %		測定範囲	
	Serum	88		83% - 93%	
	Tissue Extracts	83		76% - 88%	
	Cell culture media	96		94% - 98%	
	Cit plasma	84		80% - 89%	
全工程の試験時間	1h 30m				
ステップ	One step assay				
種交差性	交差種: Human				

## 製品の概要

Human Cardiac Troponin T ELISA Kit (ab223860) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Cardiac Troponin T protein in serum, and cell culture media. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Cardiac Troponin T with 68.2 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

## 特記事項

Cardiac Troponin T is one of the three tropomyosin binding subunit that makes up the troponin complex with TnI and TnC being the other two subunits. The troponin complex is essential to the contraction of skeletal and heart muscles. Troponin T specifically binds to tropomyosin and helps position it on actin. Studies have shown elevated levels of troponin T after myocardial infarction and significantly associated with the incidence of heart failure and cardiovascular death.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

## 試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

## 製品の特性

### 保存方法

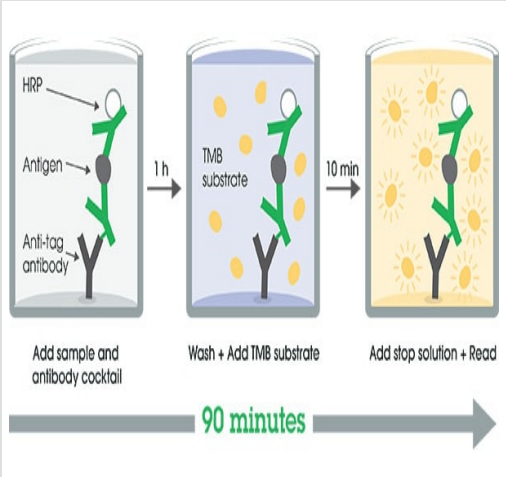
Store at +4°C. Please refer to protocols.

内容	1 x 96 tests
10X Human Cardiac Troponin T Capture Antibody	1 x 600µl
10X Human Cardiac Troponin T Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BI	1 x 6ml
Human Cardiac Troponin T Lyophilized Recombinant Protein	2 vials

内容	1 x 96 tests
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

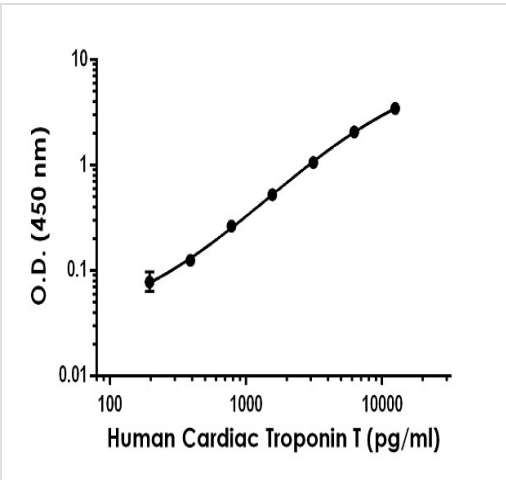
機能	Troponin T is the tropomyosin-binding subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.
組織特異性	Heart. The fetal heart shows a greater expression in the atrium than in the ventricle, while the adult heart shows a greater expression in the ventricle than in the atrium. Isoform 6 predominates in normal adult heart. Isoforms 1, 7 and 8 are expressed in fetal heart. Isoform 7 is also expressed in failing adult heart.
関連疾患	<p>Defects in TNNT2 are the cause of cardiomyopathy familial hypertrophic type 2 (CMH2) [MIM:115195]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.</p> <p>Defects in TNNT2 are the cause of cardiomyopathy dilated type 1D (CMD1D) [MIM:601494]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.</p> <p>Defects in TNNT2 are the cause of cardiomyopathy familial restrictive type 3 (RCM3) [MIM:612422]. Restrictive cardiomyopathy is a heart disorder characterized by impaired filling of the ventricles with reduced diastolic volume, in the presence of normal or near normal wall thickness and systolic function.</p>
配列類似性	Belongs to the troponin T family.

## 画像



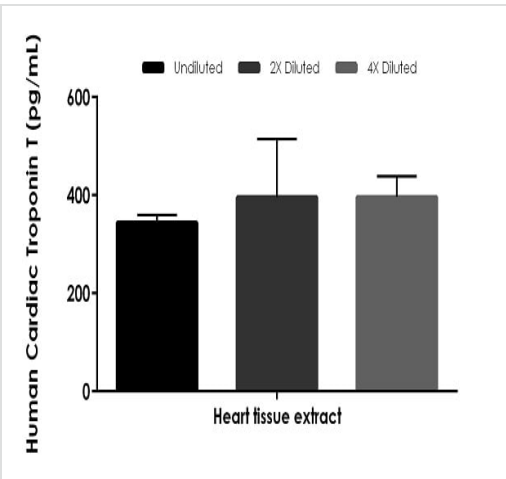
SimpleStep ELISA Protocol Diagram

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Example of human Cardiac Troponin T standard curve in Sample Diluent NS.

The Cardiac Troponin T standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean  $\pm$  SD) are graphed.



Interpolated concentrations of native Cardiac Troponin T in human heart tissue extract based on a 100  $\mu$ g/mL extract load.

The concentrations of Cardiac Troponin T were measured in duplicate and interpolated from the Cardiac Troponin T standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean Cardiac Troponin T concentration was determined to be 378.8 pg/mL in heart tissue extract

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Sandwich ELISA - Human Cardiac Troponin T ELISA  
Kit (ab223860)

To learn more about the advantages of recombinant antibodies see [here](#).

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