CC Declaration of Conformity CC						
Leclaration of Conformity according to Directive 98/79/EC, on in vitro diagnostic medical devices						
Maker (Name, Address) Authorized Representative	Getein Biotech, Inc. No. 9 Bofu Road, Luhe District, Nanjing, 211505, China Lotus NL B.V.					
(Name, Address)	Koningin Julianaplein 10, 1e Verd, 2595AA, The Hague, Netherlands.					
Medical device	Description :	FIA8000 Quantitative Immunoassay Analyzer FIA8600 Quantitative Immunoassay Analyzer Cardiac Troponin I Fast Test Kit One Step Test for CTnl (Colloidal Gold) CTnl Rapid Test (Colloidal Gold Assay) One Step Test for NT-proBNP (Colloidal Gold) One Step Test for NT-proBNP/cTnl (Colloidal Gold) One Step Test for NT-proBNP/cTnl (Colloidal Gold) One Step Test for NT-proBNP/cTnl (Colloidal Gold) One Step Test for D-Dimer (Colloidal Gold) One Step Test for PCT (Colloidal Gold) One Step Test for PCT (Colloidal Gold) One Step Test for PCT (Colloidal Gold) One Step Test for NGAL (Colloidal Gold) One Step Test for CysC (Colloidal Gold) One Step Test for CysC (Colloidal Gold) One Step Test for CYCRP (Colloidal Gold) One Step Test for CYCRP (Colloidal Gold) One Step Test for CK-MB/cTnl/H-FABP (Colloidal Gold) One Step Test for CK-MB/cTnl (Colloidal Gold) One Step Test for CK-MB/CTnl (Colloidal Gold) One Step Test for TSH (Colloidal Gold) One Step Test for TSH (Colloidal Gold) One Step Test for TA/T3 (Colloidal Gold) One Step Test for TA/T3 (Colloidal Gold) One Step Test for FOB (Colloidal Gold) One Step Test for SAA (Colloidal Gold)				

大社用人

	PCT Fast Test Kit (Immunofluorescence Assay) β2-MG Fast Test Kit (Immunofluorescence Assay) mAlb Fast Test Kit (Immunofluorescence Assay) NGAL Fast Test Kit (Immunofluorescence Assay) CysC Fast Test Kit (Immunofluorescence Assay) CK-MB Fast Test Kit (Immunofluorescence Assay) CK-MB/cTnI Fast Test Kit (Immunofluorescence Assay) HCG+β Fast Test Kit (Immunofluorescence Assay) HCG+β Fast Test Kit (Immunofluorescence Assay) PCT/CRP Fast Test Kit (Immunofluorescence Assay) PCT/CRP Fast Test Kit (Immunofluorescence Assay) CK-MB/cTnI/H-FABP Fast Test Kit (Immunofluorescence Assay) CK-MB/cTnI/H-FABP Fast Test Kit (Immunofluorescence Assay) CK-MB/cTnI/H-FABP Fast Test Kit (Immunofluorescence Assay) TSH Fast Test Kit (Immunofluorescence Assay) TSH Fast Test Kit (Immunofluorescence Assay) T3 Fast Test Kit (Immunofluorescence Assay) T4 Fast Test Kit (Immunofluorescence Assay) FOB Fast Test Kit (Immunofluorescence Assay)	e Assay)
	SAA Fast Test Kit (Immunofluorescence Assay) LH Fast Test Kit (Immunofluorescence Assay) FSH Fast Test Kit (Immunofluorescence Assay) AMH Fast Test Kit (Immunofluorescence Assay) PRL Fast Test Kit (Immunofluorescence Assay)	
	CK-MB Control cTnl Control Myo Control NT-proBNP Control D-Dimer Control	
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Classification (	T4/T3 Control T3 Control T4 Control of products according to directive : Othe	ers
	o. Type, production term (if applicable)	

ApplicableEN ISO 14971:2012EN ISO 23640:2015coordinationEN 13612:2002EN ISO15223-1:2012standards:EN 1041:2008EN ISO 18113-1:2011IEC 61010-1:2010IEC 61010-2-081:2015IEC 61326-1:2013IEC 61326-2-2:2013	EN ISO 13485:2016 EN ISO 18113-2:2011 EN ISO 18113-3:2011 IEC 61010-2-101:2015
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Signatory representative declares herein the above mentioned device meets the basic requirements of the European Parliament and the Council's in vitro diagnostic medical devices directive: 98/79/EC Annex III. This declaration of conformity is based on European Parliament and the Council's 98/79/EC directive Annex III. The compiled technical file and quality system document according to 98/79/EC directive Annex III are testified and the quality system certificate has issued by TÜV Rheinland (Shanghai) Co., Ltd.

General Manager: Enben Su

NAn July, Joth, Jul, 2019

(place and date of issue)

(name and signature onequivalent marking of authorized person)







# Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 13485:2016

This is to certify that:

Getein Biotech, Inc. No.9 Bofu Road Luhe District Nanjing Jiangsu 211505 China 基蛋生物科技股份有限公司 中国 江苏省 南京市 六合区 沿江工业开发区 博富路9号 邮编:211505

Holds Certificate No: MD 728432

and operates a Quality Management System which complies with the requirements of ISO 13485:2016 for the following scope:

Design & Development, Manufacture and Distribution of Chemiluminescence Immunoassay, Biochemistry Assay, Point of Care Assay (including Colloidal Gold Assay, Immunofluorescence Assay, Dry Chemistry Assay). Design & Development, Manufacture and Distribution of Analyzers in use of Chemiluminescence Immunoassay, Biochemistry Assay, Point of Care Assay (including Colloidal Gold Assay, Immunofluorescence Assay, Dry Chemistry Assay). 研发,生产和销售化学发光法试剂,生化试剂,即时诊断(包括胶体金法,免疫荧光法,干式化 学法)试剂。

研发,生产和销售用于化学发光法试剂,生化试剂,即时诊断(包括胶体金法,免疫荧光法, 干式化学法)试剂配套使用的分析仪。

jang Conada

For and on behalf of BSI:

Gary E Slack, Senior Vice President - Medical Devices

Original Registration Date: 2020-05-29 Latest Revision Date: 2020-07-22 Effective Date: 2020-07-26 Expiry Date: 2023-07-25

Page: 1 of 1



...making excellence a habit."

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract. An electronic certificate can be authenticated <u>online</u>. Printed copies can be validated at www.bsi-global.com/ClientDirectory or telephone +86 10 8507 3000.

Information and Contact: BSI, John M. Keynesplein 9, 1066 EP Amsterdam The Netherlands. Tel: +31 (0) 20 3460 780 BSI Group The Netherlands B.V., registered in the Netherlands under number 33264284, at John M. Keynesplein 9, 1066 EP Amsterdam, The Netherlands A Member of the BSI Group of Companies.



# Cardiac Troponin I Fast Test Kit

**User Manual** 

# Cat.# CG2001

CE IVD

#### INTENDED USE

Cardiac Troponin I Fast Test Kit is intended for *in vitro* qualitative and semi-quantitative determination of cardiac Troponin I (cTnI) in serum, plasma or whole blood. This test is used as an aid in the diagnosis of myocardial injury such as Acute Myocardial Infarction (AMI), Unstable Angina, Acute Myocarditis and Acute Coronary Syndrome (ACS).

#### SUMMARY

Troponin, a molecular complex that is bound to the thin filament (actin) of striated muscle fibers, acts with intracellular calcium to control the interaction of the thin filament with the thick filament (myosin), thus regulating muscle contraction. Troponin consists of three subunits: T, which connects the troponin complex and tropomyosin (another cardiac muscle regulatory protein); I, which prevents muscle contraction in the absence of calcium; and C, which binds calcium. Cardiac Troponin I (MW 22.5 kDa) and the two skeletal muscle isoforms of Troponin I have considerable amino acid sequence homology, but cTnl contains an additional N-terminal sequence and is highly specific for myocardium.

Clinical studies have demonstrated the release of cTnl into the blood stream within hours following acute myocardial infarctions (AMI) or ischemic damage. Elevated levels of cTnl are detectable in blood within 4 to 6 hours after the onset of chest pain, reaching peak concentrations in approximately 8 to 28 hours, and remain elevated for 3 to 10 days following AMI. Due to the high myocardial specificity and the long duration of elevation, cTnl has become an important marker in the diagnosis and

evaluation of patients suspected of having an AMI. The current guideline of The Joint European Society of Cardiology/ American College of Cardiology Committee support the use of cTnI as a preferred marker of myocardial injury. Several major studies have shown that cTnI is also a predictor of cardiac risk in patients with unstable angina. The American College of Cardiology and the American Heart Association's current guidelines recommend using troponin results when making treatment decisions regarding unstable angina and non-ST segment elevation MI (NSTEMI).

#### PRINCIPLE

The test uses an anti-human cTnI monoclonal antibody conjugated with colloidal gold and another anti-human cTnI monoclonal antibody coated on the test line. After the sample has been applied to the test strip, the gold-labelled anti-human cTnI monoclonal antibody binds with the cTnI in sample and forms a marked antigen-antibody complex. This complex moves to the test card detection zone by capillary action. Then marked antigen-antibody complex is captured on the test line by the anti-human cTnI monoclonal antibody resulting in a purplish red streak appears on the test line. The color intensity of the test line increases in proportion to the amount of cTnI in sample.

#### CONTENTS

#### A kit contains:

1. Getein cTnI test card in a sealed pouch with desiccant

2. Disposable pipet ······ 25
3. User manual ······ 1
4. Standard colorimetric card ······ 1
5. Whole blood buffer ······ 1

#### A test card consists of:

A plastic shell and a reagent strip which is composed of a sample pad, a colloid gold pad (coated with gold-labelled antihuman cTnI monoclonal antibody), nitrocellulose membrane (the test line is coated with anti-human cTnI monoclonal antibody, and the control line is coated with rabbit anti-mouse IgG antibody), absorbent paper and liner.

#### Whole blood buffer composition:

Phosphate buffered saline, proteins, detergent, preservative, stabilizer.

Note: Do not mix or interchange different batches of kits.

#### STORAGE AND STABILITY

Store the test card at  $4 \sim 30^{\circ}$ C with a valid period of 24 months. Use the test card within 1 hour once the foil pouch is opened. Store the whole blood buffer at  $0 \sim 30^{\circ}$ C with a valid period of 24 months.

Store the whole blood buffer at 2~8°C for better results.

#### PRECAUTIONS

- 1. For in vitro diagnostic use only.
- 2. For professional use only.
- 3. Do not use the kit beyond the expiration date.
- 4. Do not use the test card if the foil pouch is damaged.
- 5. Do not open pouches until ready to perform the test.
- 6. Do not reuse the test card.
- 7. Do not reuse the pipet.
- 8. Handle all specimens as potentially infectious. Proper handling and disposal methods should be followed in accordance with local regulations.
- 9. Carefully read and follow user manual to ensure proper test performance.

#### SPECIMEN COLLECTION AND PREPARATION

- This test can be used for serum, plasma or whole blood samples. Heparin, EDTA or sodium citrate should be used as the anticoagulant for plasma and whole blood. Samples should be free of hemolysis.
- 2. Suggest using serum or plasma for better results.
- Serum or plasma can be used directly. For whole blood sample, whole blood buffer must be added before testing.
- 4. If testing will be delayed, serum and plasma samples may be stored up to 7 days at 2~8°C or stored at -20°C for 6 months before testing (whole blood sample may be stored up to 3 days at 2~8°C).

- Refrigerated or frozen sample should reach room temperature and be homogeneous before testing. Avoid multiple freezethaw cycles.
- 6. Do not use heat-inactivated samples.
- 7. SAMPLE VOLUME: 80 µl.

#### **TEST PROCEDURE**

- 1. Collect specimens according to user manual.
- 2. Test card, sample and reagent should be brought to room temperature before testing.
- Remove the test card from the sealed pouch immediately before use. Label the test card with patient or control identification.
- 4. Put the test card on a clean table, horizontally placed.
- 5. Using sample transfer pipette, deliver 80 µl of sample (or 3 drops of sample when using disposable pipet) into the sample port on the test card (for whole blood sample, one drop of whole blood buffer must be added after loading 80 µl sample on the test card).
- Read the results visually in 15 minutes. For semiquantitative interpretation of results, please refer to the standard colorimetric card.

### **TEST RESULTS**

**Negative:** A single purplish red band appears at the control area (C) without any other band at test line is a valid negative result, indicating the concentration of cTnI in the sample is below the cut-off value.

**Positive:** A single purplish red band appears at the control area (C) and a purplish red colored band appears in test line is a valid positive result. The intensity of the purplish red color in the test line helps to read the semi-quantitative result visually according to the standard colorimetric card:

Color intensity	Reference Concentration (ng/ml)
_	<0.3
+ -	0.3~1
+	1~5
++	5~15
+++	15~30
++++	30~50
++++	>50

**Invalid:** If no colored band appears in the control area (C) in 15 minutes, the test result is invalid. The test should be repeated and if the same situation happened again, please stop using this batch of products and contact your supplier.

## **EXPECTED VALUE**

The expected normal value for Troponin I was determined by testing samples from 500 apparently healthy individuals. The 99th percentile of the concentration for cTnI is 0.3 ng/ml, (The probability that value of a normal person below 0.3 ng/ml is 99%). cTnI concentration less than 0.3 ng/ml can be estimated as normal.

It is recommended that each laboratory establish its own expected values for the population it serves.

#### LIMITATIONS

As with all diagnostic tests, a definitive clinical diagnosis should not be made based on the result of a single test. The test results should be interpreted considering all other test results and clinical information such as clinical signs and symptoms.

#### REFERENCES

- Mauro Pantaghini; Undefined International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). Scientific Division Committee on Standardization of Markers of Cardiac Damage. Clin Chem Lab Med, 1998, 36:887~893.
- Antman EM, Anbe DT, Armstrong PW, et al. ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Revise the 1999 Guidelines for the Manage 2004).
- EN ISO 18113-1:2011 In vitro diagnostic medical devices -Information supplied by the manufacturer (labelling) - Part 1: Terms, definitions and general requirements.
- EN ISO 18113-2:2011 In vitro diagnostic medical devices -Information supplied by the manufacturer (labelling) - Part
  In vitro diagnostic reagents for professional use (ISO18113-2:2011).

# DESCRIPTION OF SYMBOLS USED

The following graphical symbols used in or found on Cardiac Troponin I Fast Test Kit are the most common ones appearing on medical devices and their packaging. They are explained in more details in the European Standard EN 980:2008 and International Standard ISO 15223 – 1: 2012.

Key to symbols used						
	Manufacturer		Expiration date			
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Ĩ	Consult instructions for use	LOT	Batch code			
X	Temperature limitation	IVD	<i>In vitro</i> diagnostic medical device			
$\overline{\mathbb{V}}$	Sufficient for	EC REP	Authorized representative in the European Community			
CE	CE mark	8	Do not use if package is damaged			

Thank you for purchasing Cardiac Troponin I Fast Test Kit. Please read this user manual carefully before operating to ensure proper use.

Version: WCG01A-DX-S-02

