/ 77 ELEKTRONIKA KFT.
H-1116 Budapest, Fehérvári út 98.
/ Telefon +36 1 206 1480
/ Web: E77.HU

For submission at the competent

Authorities of Republic of Moldova

Letter of Authorization

Whereas, **77 Elektronika Kft** (based at Fehérvári út 98, 1116 – Budapest (Hungary) as manufacturer of Urilyzer® Cell (Urine Microscopy Analyzer) and Urilyzer® Cell Cuvettes (Cuvette for Urine Microscopy Analyzer) do hereby declare that

Sanmedico SRL, str. Petricani 88/1, 0259 Chisinau - Republic of Moldova

is authorized to register, import, promote sell and support the above-mentioned products under the trademark "Urilyzer®" non-exclusively within the territory of Republic of Moldova as a Distributor. We authorize **Sanmedico SRL** to overtake the procedures regarding the registration of the mentioned products at the Authorities of Republic of Moldova. **Sanmedico SRL** is authorized to participate in tenders only in the territory of Republic of Moldova.

Analyticon Biotechnologies GmbH (based at Am Muehlenberg 10, 35104 Lichtenfels (Germany) as distributor of 77 Elektronika Kft is the owner of the trademark "Urilyzer®". 77 Elektronika Kft confirms, that Analyticon Biotechnologies GmbH is the brand owner of the above-mentioned products.

This Letter of Authorization is valid until 31.12.2023. It could be elongated by 77 Elektronika Kft for another period in accordance with **Sanmedico SRL** Cancellation must be in writing with a cancellation period of 3 Months for each party.

For and on behalf of 77 Elektronika Kft

Signed on 17th July 2023, Budapest, Hungary

Sándor Zettwitz

managing director

77 Elektronika Műszeripari Kft.
H-1116 Budapest,
Fehérvári út 98.
23.

Digitally signed by Dolgopol Iulian
Date: 2025.03.26 08:58:18 EET
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

Certificate

TÜVRheinland®

Quality Management System
EN ISO 13485:2016

Registration No.: SX 1006099-1

Organization: 77 Elektronika Műszeripari Kft.
Fehérvári út 98.
1116 Budapest
Hungary

Scope: Design and development, production, distribution, installation and servicing of blood glucose measuring systems, urine analyzers and rapid test readers, including related consumables.

The Certification Body of TÜV Rheinland LGA Products GmbH certifies that the organization has established and applies a quality management system for medical devices.
Proof has been furnished that the requirements specified in the abovementioned standard are fulfilled. The quality management system is subject to yearly surveillance.

Report No.: 93389457-30
Effective date: 2022-11-18
Expiry date: 2025-11-17
Issue date: 2022-11-09

TÜV Rheinland LGA Products GmbH TÜVRheinland Zertifizierungsstelle

Rafał Byczkowski
TÜV Rheinland LGA Products GmbH
Tillystraße 2 · 90431 Nürnberg · Germany

DAkkS Deutsche Akkreditierungsstelle D-ZM-14169-01-02

Certificate

TÜVRheinland®

Quality Management System
EN ISO 13485:2016

Registration No.: SX 1006099-1

Organization: 77 Elektronika Műszeripari Kft.
Fehérvári út 98.
1116 Budapest
Hungary

The scope of certification includes the following additional sites:

No.	Facility	Scope
/01	Elektronika Műszeripari Kft. Fehérvári út 98. 1116 Budapest Hungary	Design and development, production, distribution, installation and servicing.
/02	77 Elektronika Műszeripari Kft. Telephely Sztregova utca 1 1116 Budapest Hungary	Manufacture and warehouse of blood glucose measuring systems, urine analyzers, related consumables and parts. Manufacturing of SMT technology.

Report No.: 93389457-30
Effective date: 2022-11-18
Expiry date: 2025-11-17
Issue date: 2022-11-09

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

Rafał Byczkowski
TÜV Rheinland LGA Products GmbH
Tillystraße 2 · 90431 Nürnberg · Germany

DAkkS Deutsche Akkreditierungsstelle D-ZM-14169-01-02

/// / 77 ELEKTRONIKA KFT.
H-1116 Budapest, Fehérvári út 98.
/ Telefon: +36 1 206 1480
/ Web: E77.HU

Declaration of identity

Urilyzer Cell instrument is a commercial variant of the UriSed mini instrument, which distributes exclusively by Analyticon Biotechnologies GmbH. Urilyzer Cell can perform measurement with Urilyzer Cell Cuvettes.

The two instruments (Urilyzer Cell and UriSed mini) are identical in almost every element:

- Measurement process: The user fills the sample to be tested into disposable cuvettes. After a short centrifugation process, the microscopic optical system of the instrument takes images of the cuvette, which are evaluated by the software running on the built-in computer.
- Optical system: Urilyzer Cell uses the same optical system for imaging, including camera, microscope, objective and illumination.
- Evaluation algorithm: Both devices use the same evaluation module to recognize the same type of urine sediment cells.
- Software: In addition to the evaluation algorithm, the entire software system is the same for both devices, only the logo in the software is different, which in the case of Urilyzer Cell is the Analyticon Biotechnologies GmbH logo.
- Cuvette: Both systems use the same cuvette to test the sample.

The only differences between the two devices are:

- The logo on the instrument
- The logo in the software
- The cuvette sleeve holder, in which the cuvette sleeves can be placed. The cuvettes are inserted into the instrument in a cuvette sleeve. This sleeve has ribs outside that prevent UriSed cuvettes from being used with the Urilyer Cell.

Urilyzer Cell Cuvettes are the commercial variant of UriSed cuvettes.

Urilyzer Cell Cuvettes and UriSed cuvettes are completely identical, they differ only in the sleeve as described above, but this does not result in any difference in the cuvette itself.

Oliver Babinszki
Quality and Environmental Management Director

/ 77 ELEKTRONIKA KFT.
H-1116 Budapest, Fehérvári út 98.

EU-DECLARATION OF CONFORMITY

Manufacturer name:	**77 Elektronika Műszeripari Kft.**
Address:	Fehérvári út 98., H-1116 Budapest
SRN number:	HU-MF-000004266

Product(s) name:	**Urilyzer Cell Cuvettes**
Reference number:	ULC001
Basic UDI-DI:	59973457CUV9W
GMDN / EMDN	61032 / W02010785
Intended purpose of the device:	Urilyzer Cell Cuvettes are disposable, single use polycarbonate specimen receptacles used to analyse uncentrifuged, human urine samples with Urilyzer Cell urine sediment analysers. It is intended for professional, laboratory use. It is intended for in vitro diagnostic use.
Classification:	A class

The manufacturer declares under its sole responsibility that the above-mentioned product complies with the requirements of the following legislation (s):

Applicable legalisations:	Regulation (EU) 2017/746 of 5 April 2017 on in vitro diagnostic medical devices

Notified Body name:	N/A
Notified Body address:	N/A
Notified Body Identification Number:	N/A
Conformity assessment procedure:	N/A
EC Certificate of conformity's type, number and validity:	N/A

Budapest, 25.05.2022.

Oliver Babinszki
Quality and Environmental Management Director

77 Elektronika Műszeripari Kft.
1116 Budapest, Fehérvári út 98.
Adószám: 10229064-2-44
BBRT: 10102093-01196703-00000005
36.

Urilyzer Cell Cuvettes

REF

ULC001

Instructions for use

Intended use:

Urilyzer Cell Cuvettes are disposable, single use polycarbonate specimen receptacles used to analyse uncentrifuged, human urine samples with Urilyzer Cell urine sediment analysers. It is intended for professional, laboratory use. It is intended for in vitro diagnostic use.

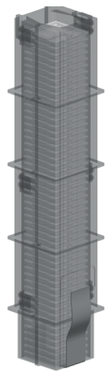
Test principle:

Urilyzer Cell Cuvettes are specimen receptacles allowing for microscopic analysis of urine samples.

Materials not provided:

- Urilyzer Cell urine sediment analyzer
- General laboratory equipment

Using cuvettes:



1. Place the cuvette holder in your analyzer

2. Remove the closing tape of the cuvette holder

Environmental Conditions

Storage temperature	0 – 45°C
Transportation temperature	-25°C – 60°C
Transportation humidity	20 – 80 %
Operation temperature	5°C – 40°C
Operational humidity	20 – 80 %

Warnings and cautions

- Do not store cuvettes in direct sunlight
- Do not remove closing tape from the cuvette holder before installing in your analyzer
- Do not remove partially full cuvette holders from your analyzer
- Each cuvette is single use, never perform a test with previously used cuvette
- Since urine is a fluid of human origin, it may be infectious and may bear the possibility of biological risks
- Handle used Urilyzer Cell Cuvettes and urine contaminants with care
- Dispose of waste according to accepted laboratory instructions and procedures
- Use cuvettes before expiration date

Check your analysers instructions for use for details on specimen collection, potential preparatory steps, result calculation, analytical and performance characteristics, interferences, limitations, quality control procedures, specific warnings and cautions

Incident reporting

Inform your Analyticon Biotechnologies service representative and your local competent authority about any serious incidents which may occur when using this product.

Symbols:

UDI	Unique Device Identifier
IVD	In vitro diagnostic medical device
REF	Catalogue Number
LOT	Lot Number
CE	The CE mark identifies that the product complies with the applicable directives of the EuropeanUnion
	Use by
0°C +45°C	Temperature Limitation
	Manufacturer
	Keep away from sunlight
	Consult instructions for use
20% 80%	Humidity limitation
	Caution
Σ 600	Contents sufficient for 600 tests
	Do NOT Reuse
HU	Country of origin and manufacturing date
	Distributed by

Version history

Version	Date	Changes
1	2022.04.12.	First release

CE

Manufacturer:

77 Elektronika Kft.

98. Fehérvári út, 1116 Budapest
HUNGARY
www.en.e77.hu
sales@e77.hu
Tel: + 36 1 206 - 1480
Fax: + 36 1 206 - 1481

Distributed by:

Analyticon Biotechnologies GmbH

Am Muehlenberg 10
35104 Lichtenfels, Germany
info@analyticon-diagnostics.com
www.analyticon-diagnostics.com

For submission at the competent Authorities of the Republic of Moldova

analyticon

Letter of Authorization

WHEREAS, **Analyticon Biotechnologies GmbH**, who is an established, and well-known manufacturer and producer of Medical Diagnostics having production facilities at 35104 Lichtenfels (Germany), Am Muehlenberg 10, do hereby declare that

Sanmedico SRL
A. Corobceanu street 7A, apt. 9, Chişinău MD-2012, Moldova
Tel: +373 60 15-57-88
E-Mail: sanmedico.office@gmail.com

is authorized to register, import, promote and sell our urinalysis and hematology products non-exclusively within the territory of the Republic of Moldova as a Distributor for our products. We authorize Sanmedico SRL to overtake the procedures regarding the registration of the mentioned products and the Renewal of expiring Licenses for Sale of our product range of these In-Vitro-Diagnostic products at the Authorities of the Republic of Moldova. Sanmedico SRL is authorized to participate in tenders only in the territory of the Republic of Moldova. This Letter of Authorization is valid for three (3) years from the date of issue. It could be elongated from Analyticon Biotechnologies AG for another period in accordance with Sanmedico SRL. Cancellation must be in writing with a cancellation period of 3 Months for each party.

The construction of this agreement, validity and performance of this agreement and all subsequent agreements shall be exclusively governed by the laws of Germany. This agreement shall be interpreted under German Law. The laws of the Federal Republic of Germany are legally binding; this excludes the validity of the UN purchasing laws, particularly the United Nations treaty on contracts regarding the international sale of moveable property. This is also valid should the DISTRIBUTOR not be of German nationality or his head office be situated outside Germany. The parties submit to the exclusive jurisdiction of the District Courts at Korbach, Postal Code D-34497, Germany / the regional court of the city of Kassel, Germany. This Authorisation letter will replace all other existing Authorisation letters between the parties.

For and on behalf of Analyticon Biotechnologies GmbH
Signed on 14th June 2023, at Lichtenfels (Germany)

Analyticon Biotechnologies GmbH · Am Mühlenberg 10 · 35104 Lichtenfels · Germany

Dennis Kasper
Business Area Manager Europe (East) & Africa
Analyticon Biotechnologies GmbH

CERTIFICATE

EN ISO 13485:2016

DEKRA Certification GmbH hereby certifies that the organization

Analyticon Biotechnologies GmbH

Scope of certification:

Development, production and distribution of in-vitro diagnostics from the field of urine diagnostics for professional and near- patient applications
Distribution, service and installation of in-vitro-diagnostic analyzers from the field of urine diagnostics.
Distribution of in-vitro diagnostic devices from the field of hematology
Distribution and service of in-vitro-diagnostic analyzers from the field of hematology

Certified location:

Am Mühlenberg 10, 35104 Lichtenfels, Germany
(further locations see annex)

has established and maintains a quality management system according to the above mentioned standard.
The conformity was adduced with audit report no. 51519-R1-00.

Certificate registration no.:	51519-14-02_EN	Certificate valid from:	2023-03-06
Validity of previous certificate:	2023-03-05	Certificate valid to:	2025-01-10

Karin Leicht
DEKRA Certification GmbH, Stuttgart, 2023-03-06

DAkkS Deutsche Akkreditierungsstelle D-ZM-16029-08-00

Annex to the Certificate No. 51519-14-02

valid from 2023-03-06 to 2025-01-10

The following locations/companies belong to the certificate above:

	Headquarters		**Scope of certification**
	Analyticon Biotechnologies GmbH	Am Mühlenberg 10 35104 Lichtenfels Germany	see page 1
	at the following locations/at the companies at the following locations		**Scopes of certification**
1.		Am Teichsberg 10 Lichtenfels-Sachsenberg Germany	Reception, shipping and storage of raw materials, semi-finished goods, finished goods and analyzers from the fields of urine diagnostics and hematology.

DEKRA Certification GmbH Stuttgart, Handwerkstraße 15 D-70565

Karin Leicht
DEKRA Certification GmbH, Stuttgart, 2023-03-06

Authorization Certificate

analyticon

Vitalie Goreacii

SANMEDICO SRL

This is to certify that the above named general manager has successfully completed the full application and technical training which was specifically prepared and carried out on the Analyticon Biotechnologies GmbH equipment mentioned below on May 22nd to 23rd, 2023

Urilyzer® Cell

We hereby state that the general manager is authorized and qualified by Analyticon to do installation, operation, user and technical training, service and maintenance of the equipment listed above.

Analyticon
Biotechnologies GmbH
Customer Support & Trainings

Analyticon Biotechnologies GmbH · Germany · Lichtenfels · 35104 · Mühlenberg 10 · analyticon

Nathalie Mütze
Manager Customer Support

Nils Albrecht
Customer Support

CS_FB_OR_9999

Konformitätserklärung – Urin Diagnostik / Declaration of Conformity – Urine Diagnostics

Analyticon Biotechnologies GmbH

Am Mühlenberg 10,
35104 Lichtenfels, Germany

Wir erklären in alleiniger Verantwortung, dass die Medizinprodukte für die In-vitro-Diagnostik
We declare under our sole responsibility that the in vitro diagnostic medical devices

Bezeichnung und Artikelnummer: siehe Anhang
Description and article number: see annex

mit folgender Klassifizierung nach der Richtlinie über In-Vitro-Diagnostika 98/79/EG
classified as follows according to the directive on in vitro diagnostic medical devices 98/79/EC

( ) Produkt der Liste A, Anhang II / Device of List A, Annex II
( ) Produkt der Liste B, Anhang II / Device of List B, Annex II
( ) Produkt zur Eigenanwendung, das nicht in Anhang II genannt ist / *Device for self-testing not listed in Annex II*
(X) Sonstiges Produkt / *Other device*

allen Anforderungen der Richtlinie über In-vitro-Diagnostika 98/79/EG entspricht, die anwendbar sind.
meet all the provisions of the directive on in vitro diagnostic medical devices 98/79/EC which apply to it.

Konformitätsbewertungsverfahren *Conformity assessment procedure*	IVD 98/79/EG, Artikel 9 (1) und Anhang III / *IVD 98/79/EC Article 9 (1) and Annex III*
EDMA-Code und Registrierungsnummer *EDMS-Code and Registration-No.*	siehe Anhang *see annex*
Konformitätsbewertungsstelle *Notified Body (if consulted)*	nicht erforderlich, die Bewertung wurde in Eigenverantwortung des Herstellers durchgeführt *not applicable, evaluation was carried out under the manufacturer's own responsibility*

Ort, Datum / *Place, date*	Name und Funktion / *Name and function*
Lichtenfels, 18.01.2023	Dr. Jürgen Schmich (Direktor Qualitätssicherung / Director Quality Assurance)

Analyticon Biotechnologies GmbH
Am Mühlenberg 10,
35104 Lichtenfels, Germany

Anhang zur Konformitätserklärung – Urin Diagnostik /
Declaration of Conformity, Annex – Urine Diagnostics

CombiScreen Urine Controls

Name	REF	EDMS-Code	Reg.-Nr.
CombiScreen® Dip Check	93010	11.50.90.02.00	DE/CA30/00041388
CombiScreen® Drop Check	93015	11.50.90.02.00	DE/CA30/00041388

Konformitätserklärung – Urin Diagnostik / Declaration of Conformity – Urine Diagnostics

Analyticon Biotechnologies GmbH

Am Mühlenberg 10,
35104 Lichtenfels, Germany

Wir erklären in alleiniger Verantwortung, dass die Medizinprodukte für die In-vitro-Diagnostik
We declare under our sole responsibility that the in vitro diagnostic medical devices

Bezeichnung und Artikelnummer: siehe Anhang
Description and article number: see annex

mit folgender Klassifizierung nach der Richtlinie über In-Vitro-Diagnostika 98/79/EG
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( ) Produkt der Liste A, Anhang II / Device of List A, Annex II
( ) Produkt der Liste B, Anhang II / Device of List B, Annex II
( ) Produkt zur Eigenanwendung, das nicht in Anhang II genannt ist / *Device for self-testing not listed in Annex II*
(X) Sonstiges Produkt / *Other device*

allen Anforderungen der Richtlinie über In-vitro-Diagnostika 98/79/EG entspricht, die anwendbar sind.
meet all the provisions of the directive on in vitro diagnostic medical devices 98/79/EC which apply to it.

Konformitätsbewertungsverfahren *Conformity assessment procedure*	IVD 98/79/EG, Artikel 9 (1) und Anhang III / *IVD 98/79/EC Article 9 (1) and Annex III*
EDMA-Code und Registrierungsnummer *EDMS-Code and Registration-No.*	siehe Anhang *see annex*
Konformitätsbewertungsstelle *Notified Body (if consulted)*	nicht erforderlich, die Bewertung wurde in Eigenverantwortung des Herstellers durchgeführt *not applicable, evaluation was carried out under the manufacturer's own responsibility*

Ort, Datum / *Place, date*	Name und Funktion / *Name and function*
Lichtenfels, 18.01.2023	Dr. Jürgen Schmich (Direktor Qualitätssicherung / Director Quality Assurance)

Analyticon Biotechnologies GmbH
Am Mühlenberg 10,
35104 Lichtenfels, Germany

Test strips visual and semi-automated systems

Name	REF	EDMS-Code	Reg.-Nr.
CombiScreen® 11SYS	93100	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 11SYS	93150	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 10SL	93120	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 10SL	93120A	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 10SL	93120B	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 3	93108A	11.70.02.02.00	DE/CA30/00017200
CombiScreen® GAK	93107	11.70.02.02.00	DE/CA30/00017200
CombiScreen® GAK	93107A	11.70.02.02.00	DE/CA30/00017200
CombiScreen® GP	93104	11.70.02.02.00	DE/CA30/00017200
CombiScreen® GPK	93105	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 11SYS PLUS	94100	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 11SYS PLUS	94150	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 11SYS PLUS	94150BC	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 10SL PLUS	94120	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 9 PLUS	94115	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 9+Leuko PLUS	94250	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 9+Leuko PLUS	94200	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 7SYS PLUS	94110	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 7SYS PLUS	94110A	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 5SYS PLUS	94109	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 5+Leuko PLUS	94517	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 5+Leuko PLUS	94117	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 5+N PLUS	94535	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 5+N PLUS	94135	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 3 PLUS	94508	11.70.02.02.00	DE/CA30/00017200
CombiScreen® 3 PLUS	94108	11.70.02.02.00	DE/CA30/00017200
CombiScreen® Glu PLUS	94501	11.70.02.02.00	DE/CA30/00017200
CombiScreen® Nitrit PLUS	94506	11.70.02.02.00	DE/CA30/00017200
CombiScreen® mALB / CREA	94025	11.70.02.02.00	DE/CA30/00017200

Urilyzer® 100 Pro

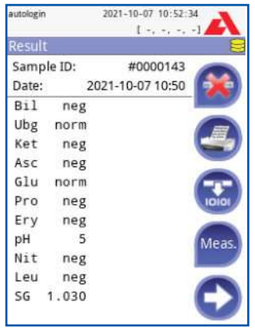
analyticon®

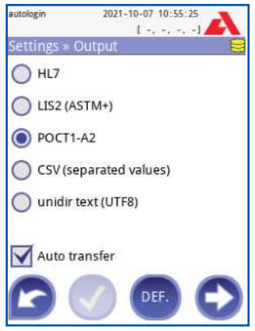
A new way in urinalysis

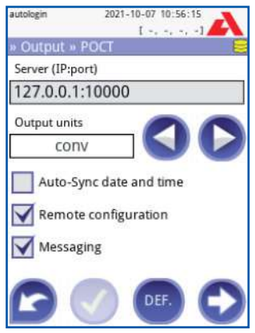
- Easy-to-use
- Smart and safe operation
- Extended connectivity capabilities
- POCT-features

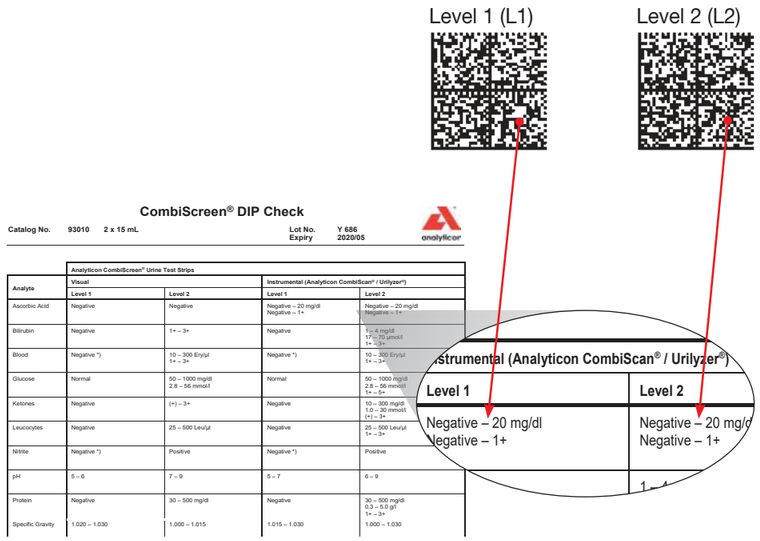
Easy-to-use

- A Start-Up Wizard leads the operator through the user-defined settings upon first start of the device.
- Automatic start of the measurement after placing the urine test strip allows hygienic and clean operation of the analyzer
- Positive results, reminders and warnings are shown in color (e.g. red or yellow) and can be easily identified
- The user interface offers a high level of customization with flexible testing and reporting options







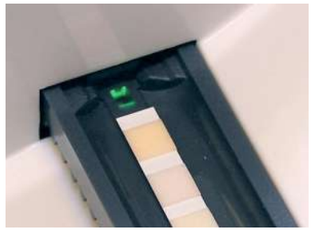


Smart and safe operation

- Tracking of LOT-No. for urine strips and quality control solutions
- Data management provides multiple filter options
- QC ranges can be entered via QR-Code
- Automated QC analysis with customizable QC test reminders including lockout function
- System allows the allocation of different security levels to individual users

Connectivity capabilities

- Data can be transferred via serial connection or Ethernet
- A variety of interfaces for connecting external barcode scanner and/or keyboard (USB or PS2)
- Implemented protocols: HL7, LIS2 (ASTM+), POCT1-A2



POCT1-A2 features

- Validated for use with Siemens UniPOC™ and POCcelerator™*
- Remote configuration via middleware
- Automated synchronization of date and time via the middleware
- Messaging function allows the POCT datamanager to send messages to addressed operators or instruments
- Positive Patient Identification (PPID)
- Remote software update
- Test strip management
- QC solution management
- Proficiency test feature

* please contact us for other middleware options

Technical Specifications

Type	Semi-automated urine test strip analyzer
Measurement technology	Reflectance photometer with 4 discrete wavelengths 505, 530, 620, 660 nm
Parameters	11 Parameter: Bilirubin, Urobilinogen, Ketones, Ascorbic Acid, Glucose, Protein (Albumin), Blood (Hemoglobin), pH, Nitrite, Leucocytes, Specific Gravity 7 Parameter: Ketones, Glucose, Protein (Albumin), Blood (Hemoglobin), Nitrite, Leucocytes, pH 5 Parameter: Glucose, Protein (Albumin), Blood (Hemoglobin), Nitrite, Leucocytes 2 Parameter: Albumin, Creatinine
Throughput	Up to 50 tests/hour (in normal mode) Up to 120 tests/hour (in fast mode)
Data storage	Patient database: 3.000 tests QC database: 1.000 tests
Display	3.5” QVGA touchscreen LCD
Interfaces	Serial RS232, USB Type A, USB Type B, PS2 (external keyboard, barcode reader), Ethernet
Dimensions	208 x 290 x 80 mm (WxDxH)
Weight	1.2 kg
Power supply	7.5 V DC / 3 A
Operating environment	Temperature: +15°C to +32°C Relative humidity (non-condensing): 30% to 80% Atmospheric pressure: 70 kPa to 106 kPa
Printer	Built-in thermal printer
Barcode reader	External
Protocols	LIS2 (ASTM+), HL7, POCT1-A2
Features	• Start-Up Wizard upon first usage • Operator Management with advanced system security options • Test strip & QC Management (full traceability via LOT and Expiry entry) • Data Management, Power Management • Autostart of measurement (automatic strip detection) • Automatic printout or transfer of result • Flexible advanced information entry (e.g. sample color and turbidity) • Flexible advanced testing and reporting options (e.g. sediment recommendation flag)
Laguages	Czech, Danish, English, Finish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Romanian, Russian, Spanish, Swedish

Art.-No.: UL0100Pro

Consumables

Urine test strips	Pack size	Art.-No.
CombiScreen® 11SYS PLUS	100/150 strips	94100/94150
CombiScreen® 7SYS PLUS	100/150 strips	94110/94110A
CombiScreen® 5SYS PLUS	100 strips	94109
CombiScreen® 11SYS	100/150 strips	93100/93150
CombiScreen® mALB / CREA	25 strips	94025

Control	Pack size	Art.-No.
CombiScreen® Dip Check	2 x 15 ml	93010
CombiScreen® Drop Check	2 x 5 ml	93015

Distributor information

Analyticon Biotechnologies GmbH
Am Muehlenberg 10
35104 Lichtenfels - Germany
Phone: +49 6454 7991-0
info@analyticon-diagnostics.com
www.analyticon-diagnostics.com

MUL100_GB_62_001_09.01_20210924

CombiScreen® Urine Control

CombiScreen® Dip Check Art.-No. 93010

Ready-to-use dipper control

2 x 15 ml (Level 1 + Level 2)

Open vial stability (at 2–8 °C) of 75 days or 20 determinations (whichever occurs first)

CombiScreen® Drop Check Art.-No. 93015

Ready-to-use dropper control

2 x 5 ml (Level 1 + Level 2)

Open vial stability of 18 months (2–8 °C) or 30 days (20–25 °C)

Features:

- Based on human standard material
- Suitable for use in POC testing
- Shatter proof vials (polystyrene)
- 2D-barcode on tube vial for direct entry of lot number and target values into Urilyzer® 100 Pro and Urilyzer® 500 Pro instruments
- Target values for CombiScreen® test strips as well as other test strip brands
- Parameters: Bilirubin, Urobilinogen, Ketones, Glucose, Protein, Blood, pH, Nitrite, Leukocytes, Specific Gravity, Creatinine, Microalbumin and hCG
- Qualitative hCG values

CombiScreen® urine controls cover a wide range of analytes, including pregnancy markers and Microalbumin. The controls are designed for use in manual and automated methods, to monitor the performance of a variety of urine test strips.

Analyticon Biotechnologies GmbH
Am Muehlenberg 10
35104 Lichtenfels - Germany
Phone: +49 6454 7991-0
info@analyticon-diagnostics.com
www.analyticon-diagnostics.com

MCSDS_DE_GB_62_001_02.01_20210924

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CombiScreen® Drop Check Level 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CombiScreen® Drop Check Level 1

Product group: Endprodukt / Endproduct

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Company name: Analyticon® Biotechnologies GmbH
Street: Am Mühlenberg 10
Place: D-35104 Lichtenfels
Telephone: +49 (0) 6454/7991-0 Telefax: +49 (0) 6454/7991-30
E-mail: support@analyticon-diagnostics.com
Contact person: Zentrale Telephone: +49 (0) 6454/7991-0
Internet: http://www.analyticon-diagnostics.com

1.4. Emergency telephone number: Zentrale: +49 (0) 6454/7991-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

Restricted to professional users.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
	Human Source Material			10-60 %

Full text of H and EUH statements: see section 16.

Further Information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.
Rinse mouth thoroughly with water.
Seek medical advice immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.
Take up dust-free and set down dust-free.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.
The floor should be leak tight, jointless and not absorbent.
All work processes must always be designed so that the following is excluded:

Advice on protection against fire and explosion

Usual measures for fire prevention.
When using do not smoke.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Wash hands before breaks and after work.

Further information on handling

When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Keep only in the original container in a cool, well-ventilated place.

Further information on storage conditions

2 8

Protect against:

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. EN ISO 374

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Wear suitable protective clothing. Suitable protective clothing:

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:		
Colour:		
Odour:	characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined not applicable

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Decomposition temperature:	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Relative vapour density:	not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.

Self-ignition temperature

Solid:	not determined
Gas:	not applicable

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

May cause decomposition by long-term light influence.

10.5. Incompatible materials

No information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

No information available.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Sensitising effects

No information available.

STOT-repeated exposure

No information available.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as not hazardous according to Directive 1999/45/EC.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation.
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,11.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing,

transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.
The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CombiScreen® Drop Check Level 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CombiScreen® Drop Check Level 2

Product group: Endprodukt / Endproduct

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Company name: Analyticon® Biotechnologies GmbH
Street: Am Mühlenberg 10
Place: D-35104 Lichtenfels
Telephone: +49 (0) 6454/7991-0 Telefax: +49 (0) 6454/7991-30
E-mail: support@analyticon-diagnostics.com
Contact person: Zentrale Telephone: +49 (0) 6454/7991-0
Internet: http://www.analyticon-diagnostics.com

1.4. Emergency telephone number: Zentrale: +49 (0) 6454/7991-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

Restricted to professional users.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
	Human Source Material			10-60 %

Full text of H and EUH statements: see section 16.

Further Information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.
Rinse mouth thoroughly with water.
Seek medical advice immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.
Take up dust-free and set down dust-free.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.
The floor should be leak tight, jointless and not absorbent.
All work processes must always be designed so that the following is excluded:

Advice on protection against fire and explosion

Usual measures for fire prevention.
When using do not smoke.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Wash hands before breaks and after work.

Further information on handling

When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Keep only in the original container in a cool, well-ventilated place.

Further information on storage conditions

2 8

Protect against:

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. EN ISO 374

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Wear suitable protective clothing. Suitable protective clothing:

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:		
Colour:		
Odour:	characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined not applicable

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Decomposition temperature:	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Relative vapour density:	not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.

Self-ignition temperature

Solid:	not determined
Gas:	not applicable

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

May cause decomposition by long-term light influence.

10.5. Incompatible materials

No information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

No information available.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Sensitising effects

No information available.

STOT-repeated exposure

No information available.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as not hazardous according to Directive 1999/45/EC.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation.
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,11.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing,

transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.
The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CombiScreen® 11SYS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CombiScreen® 11SYS

Product group: Endprodukt / Endproduct

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Company name:	Analyticon® Biotechnologies GmbH		
Street:	Am Mühlenberg 10		
Place:	D-35104 Lichtenfels		
Telephone:	+49 (0) 6454/7991-0	Telefax:	+49 (0) 6454/7991-30
E-mail:	support@analyticon-diagnostics.com		
Contact person:	Zentrale	Telephone:	+49 (0) 6454/7991-0
Internet:	http://www.analyticon-diagnostics.com		

1.4. Emergency telephone number: Zentrale: +49 (0) 6454/7991-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

none (according to Regulation (EC) No 1907/2006 (REACH))

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth thoroughly with water.
Seek medical advice immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid dust formation.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Take up dust-free and set down dust-free.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.

The floor should be leak tight, jointless and not absorbent.

All work processes must always be designed so that the following is excluded:

Advice on protection against fire and explosion

Usual measures for fire prevention.

When using do not smoke.

Advice on general occupational hygiene

Take off contaminated clothing. When using do not eat or drink. Wash hands before breaks and after work.

Further information on handling

When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place.

Further information on storage conditions

15 25

Protect against:

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m³	fib/cm³	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	
		-	2		STEL (15 min)	

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. EN ISO 374

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Respiratory protection necessary at:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:		
Colour:		
Odour:	characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Decomposition temperature:		not determined
pH-Value:		No data available
Water solubility:		The study does not need to be conducted because the substance is known to be insoluble in water.
Solubility in other solvents		
Buffer		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density:		not determined
Relative vapour density:		not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.

Self-ignition temperature

Solid:	not determined
Gas:	not applicable

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

May cause decomposition by long-term light influence.

10.5. Incompatible materials

No information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

No information available.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

No information available.

Sensitising effects

No information available.

Carcinogenic/mutagenic/toxic effects for reproduction

No information available.

STOT-repeated exposure

No information available.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

The product has not been tested.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

Other applicable information (marine transport)

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

2004/42/EC (VOC): 0,009 %

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 11.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
Skin Corr: Skin corrosion

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Getein Biotech, Inc.
Add: No.9 Bofu Road, Luhe District, Nanjing, 211505, China
Tel: 86-25-68568508 Email: overseas@geteincom.cn Web: www.bio-GP.com.cn

Document No.: GP-GMSQ-2024121101

Letter of Authorization

To whom it may concern,

We, Getein Biotech, Inc. (No.9 BoFu Road, Luhe District, Nanjing, 211505, China), hereby authorize Sanmedico SRL (Address: Republic of Moldova, Chisinau, MD-2059, Petricani street, 88/1, office 10) as our official and non-exclusive distributor for registration, promoting, selling, distributing and providing after-sale services of under-mentioned product in the territory of Moldova only:

FIA8000 Quantitative Immunoassay Analyzer and Reagents

Getein1100 Immunofluorescence Quantitative Analyzer and Reagents

Getein1160 Immunofluorescence Quantitative Analyzer and Reagents

Getein 1600 Immunofluorescence Quantitative Analyzer and Reagents

Sanmedico SRL will comply with the laws and regulations of the countries and regions where they are located in and where they are selling mentioned product.

Sanmedico SRL will carry out marketing efforts to fulfill service and maintenance for above mentioned products and will provide with users benefits of having a local stock of above mentioned products and on time delivery with every order, supported by a local service in local language.

This authorization starts from Jan 1, 2025and will be valid to December 31 2025.

Getein Biotech, Inc. has the right to terminate the authorization before validity and will inform **Sanmedico SRL** with 10 days in advance.

Getein Biotech, Inc.

基蛋生物科技股份有限公司
GETEIN BIOTECH, INC.

Name: Steven Zhou
Position: Overseas Sales Director

Steven Zhou

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:

Please see scope page.

For and on behalf of BSI:

Graeme Tunbridge, Senior Vice President Medical Devices

Original Registration Date: 2020-05-29
Latest Revision Date: 2023-04-26

Effective Date: 2023-07-26
Expiry Date: 2026-07-25

...making excellence a habit.™

Certificate No: **MD 728432**

Registered Scope:

Design & Development, Manufacture and Distribution of Chemiluminescence Immunoassay, Biochemistry Assay, Point of Care Assay (including Colloidal Gold Assay, Immunofluorescence Assay, Dry Chemistry Assay), PCR Assay and Colloidal Gold self-testing Assay to detect infectious disease. 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), PCR Assay to detect infectious disease, Immunofluorescence self-testing Assay to detect dyslipidemia disease, Blood Coagulation Assay to detect thrombotic disease.
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，传染病相关PCR分子诊断试剂和胶体金自测试剂。 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，传染病相关PCR分子诊断试剂，血脂异常疾病相关免疫荧光自测试剂，血栓疾病相关血凝试剂配套使用的分析仪。

Original Registration Date: 2020-05-29
Latest Revision Date: 2023-04-26

Effective Date: 2023-07-26
Expiry Date: 2026-07-25

Certificate No: **MD 728432**

Location	Registered Activities
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	Design & Development, Manufacture and Distribution of Chemiluminescence Immunoassay, Biochemistry Assay, Point of Care Assay (including Colloidal Gold Assay, Immunofluorescence Assay, Dry Chemistry Assay), PCR Assay and Colloidal Gold self-testing Assay to detect infectious disease. 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), PCR Assay to detect infectious disease, Immunofluorescence self-testing Assay to detect dyslipidemia disease, Blood Coagulation Assay to detect thrombotic disease. 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，传染病相关PCR分子诊断试剂和胶体金自测试剂。 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，传染病相关PCR分子诊断试剂，血脂异常疾病相关免疫荧光自测试剂，血栓疾病相关血凝试剂配套使用的分析仪。
Getein Biotech, Inc. No. 6 KeFeng Road Jiangbei New District Nanjing Jiangsu 211505 China 基蛋生物科技股份有限公司 中国 江苏省 南京 江北新区 科丰路6号 邮编：211505	Manufacture of Chemiluminescence Immunoassay, Biochemistry Assay, Point of Care Assay (including Colloidal Gold Assay, Immunofluorescence Assay, Dry Chemistry Assay), Colloidal Gold self-testing Assay to detect infectious disease. Manufacture of Analyzers in use of Chemiluminescence Immunoassay, Biochemistry Assay, Point of Care Assay (including Colloidal Gold Assay, Immunofluorescence Assay, Dry Chemistry Assay), PCR Assay to detect infectious disease, Immunofluorescence self-testing Assay to detect dyslipidemia disease, Blood Coagulation Assay to detect thrombotic disease. 生产化学发光法试剂，生化试剂，即时诊断（包括胶体金法，免疫荧光法，干式化学法）试剂和传染病相关胶体金自测试剂。 生产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，传染病相关PCR分子诊断试剂，血脂异常疾病相关免疫荧光自测试剂，血栓疾病相关血凝试剂配套使用的分析仪。

Original Registration Date: 2020-05-29

Effective Date: 2023-07-26

Latest Revision Date: 2023-04-26

Expiry Date: 2026-07-25

EC Declaration of Conformity

according to Directive 98/79/EC, on in vitro diagnostic medical devices

Ref. No.:20220513-A05

Manufacturer
(Name, Address)

Getein Biotech, Inc.
No. 9 Bofu Road, Luhe District, Nanjing, 211505, China

Authorized Representative
(Name, Address）

CMC Medical Devices & Drugs S.L.
Add: C/ Horacio Lengo Nº 18, CP 29006, Málaga, Spain

Medical device

No.	Product Name
1	Getein 1100 Immunofluorescence Quantitative Analyzer
2	Cardiac Troponin I Fast Test Kit (Immunofluorescence Assay)
3	NT-proBNP Fast Test Kit (Immunofluorescence Assay)
4	hs-CRP+CRP Fast Test Kit (Immunofluorescence Assay)
5	NT-proBNP/cTnI Fast Test Kit (Immunofluorescence Assay)
6	CK-MB/cTnI/Myo Fast Test Kit (Immunofluorescence Assay)
7	D-Dimer Fast Test Kit (Immunofluorescence Assay)
8	PCT Fast Test Kit (Immunofluorescence Assay)
9	CysC Fast Test Kit (Immunofluorescence Assay)
10	mAlb Fast Test Kit (Immunofluorescence Assay)
11	NGAL Fast Test Kit (Immunofluorescence Assay)
12	β2-MG Fast Test Kit (Immunofluorescence Assay)
13	CK-MB/cTnI Fast Test Kit (Immunofluorescence Assay)
14	HCG+β Fast Test Kit (Immunofluorescence Assay)
15	H-FABP Fast Test Kit (Immunofluorescence Assay)
16	PCT/CRP Fast Test Kit (Immunofluorescence Assay)
17	CK-MB/cTnI/H-FABP Fast Test Kit (Immunofluorescence Assay)
18	HbA1c Fast Test Kit (Immunofluorescence Assay)
19	NT-proBNP/NGAL Fast Test Kit (Immunofluorescence Assay)
20	CK-MB Fast Test Kit (Immunofluorescence Assay)
21	hs-cTnI Fast Test Kit (Immunofluorescence Assay)
22	T3 Fast Test Kit (Immunofluorescence Assay)
23	T4 Fast Test Kit (Immunofluorescence Assay)
24	TSH Fast Test Kit (Immunofluorescence Assay)
25	Scr Fast Test Kit (Immunofluorescence Assay)
26	PLGF Fast Test Kit (Immunofluorescence Assay)

27	HCY Fast Test Kit (Immunofluorescence Assay)
28	Anti-CCP Fast Test Kit (Immunofluorescence Assay)
29	25-OH-VD Fast Test Kit (Immunofluorescence Assay)
30	Lp-PLA2 Fast Test Kit (Immunofluorescence Assay)
31	FOB Fast Test Kit (Immunofluorescence Assay)
32	SAA Fast Test Kit (Immunofluorescence Assay)
33	H. pylori Fast Test Kit (Immunofluorescence Assay)
34	PRL Fast Test Kit (Immunofluorescence Assay)
35	Transferrin Fast Test Kit (Immunofluorescence Assay)
36	Insulin Fast Test Kit (Immunofluorescence Assay)
37	PG Ⅰ /PG Ⅱ Fast Test Kit (Immunofluorescence Assay)
38	LH Fast Test Kit (Immunofluorescence Assay)
39	FSH Fast Test Kit (Immunofluorescence Assay)
40	Anti-TP Fast Test Kit (Immunofluorescence Assay)
41	AFP/CEA Fast Test Kit (Immunofluorescence Assay)
42	AMH Fast Test Kit (Immunofluorescence Assay)
43	fT3 Fast Test Kit (Immunofluorescence Assay)
44	fT4 Fast Test Kit (Immunofluorescence Assay)
45	Total IgE Fast Test Kit (Immunofluorescence Assay)
46	Vit-B12 Fast Test Kit (Immunofluorescence Assay)
47	Prog Fast Test Kit (Immunofluorescence Assay)
48	Testosterone Fast Test Kit (Immunofluorescence Assay)
49	E2 Fast Test Kit (Immunofluorescence Assay)
50	RF Fast Test Kit (Immunofluorescence Assay)
51	ASO Fast Test Kit (Immunofluorescence Assay)
52	Ferritin Fast Test Kit (Immunofluorescence Assay)
53	ST2 Fast Test Kit (Immunofluorescence Assay)
54	CA125 Fast Test Kit (Immunofluorescence Assay)
55	CA19-9 Fast Test Kit (Immunofluorescence Assay)
56	CA15-3 Fast Test Kit (Immunofluorescence Assay)
57	RSV/Influenza A/B Fast Test Kit (Immunofluorescence Assay)
58	Influenza A/B Fast Test Kit (Immunofluorescence Assay)
59	RSV Fast Test Kit (Immunofluorescence Assay)
60	IL-6 Fast Test Kit (Immunofluorescence Assay)
61	BNP Fast Test Kit (Immunofluorescence Assay)
62	SAA/CRP Fast Test Kit (Immunofluorescence Assay)
63	Folate acid Fast Test Kit (Immunofluorescence Assay)
64	hs-CRP Fast Test Kit (Immunofluorescence Assay)
65	TnT Fast Test Kit (Immunofluorescence Assay)
66	PCT/IL-6 Fast Test Kit (Immunofluorescence Assay)

67	HBP Fast Test Kit (Immunofluorescence Assay)
68	S100-β Fast Test Kit (Immunofluorescence Assay)
69	CK-MB/hs-cTnI/Myo Fast Test Kit (Immunofluorescence Assay)
70	Cortisol Fast Test Kit (Immunofluorescence Assay)
71	CEA Fast Test Kit (Immunofluorescence Assay)
72	AFP/CEA Fast Test Kit (Immunofluorescence Assay)

Classification Other device (according to Annex II of the directive 98/79/EC)

Conformity assessment route Annex III of the 98/79/EC

Applicable coordination standards

EN 13612:2002	EN ISO 14971:2019	EN ISO15223-1:2016
EN ISO 18113-1:2011	EN ISO 18113-2:2011	EN ISO 18113-3:2011
EN ISO 23640:2015	EN ISO 13485:2016	ISO 780:2015
EN 61326-2-6:2006	IEC 61326-1:2013	
EN 61010-2-101:2002	IEC 61010-1:2010	

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 I.

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 BSI Group The Netherlands B. V. The manufacturer is exclusively responsible for the declaration of conformity.

General Manager Enben Su

Nanjing
13th, May, 2022
(place and date of issue)

Enben Su
(name and signature or equivalent marking of authorized person)

CE

Reference Code：GP-DT-018-07-19 Issued by 07/26/2019

CERTIFICATE

Getein Biotech

hereby certifies

Mr. Vitalie Goreacii

from Sanmedico SRL.

Completion of Getein Products Technical and Operational Training
& Qualification of After-sales Service

基蛋生物科技股份有限公司
GETEIN BIOTECH, INC.

Getein
Biotech, Inc.

CE IVD

CK-MB

Fast Test Kit

(Immunofluorescence Assay)
For in vitro Diagnostic Use

User Manual

Getein1100: Cat.# IF1018
Getein1600: Cat.# IF2018

INTENDED USE

CK-MB Fast Test Kit (Immunofluorescence Assay) is intended for in vitro quantitative determination of CK-MB in serum, plasma or whole blood. This test is used as an aid in the clinical diagnosis, prognosis and evaluation of myocardial injury such as Acute Myocardial Infarction (AMI), Unstable Angina, Acute Myocarditis and Acute Coronary Syndrome (ACS).

SUMMARY

Creatine kinases are dimer isozymes composed of two monomer subunits, CK-M (for skeletal muscle derived) and CK-B (for brain derived), which can form all three combinations of monomers: CK-BB, CK-MM, and CK-MB. BB is found primarily in the brain. Skeletal muscles primarily contain the MM isoform, with trace amount of MB (around 1-4% of total CK activity). Cardiac muscles also contain the MM isoform, but higher amount of MB, typically around 20% of total CK activity. CK-MB is a more sensitive marker of myocardial injury than total CK activity, because it has a lower basal level and a much narrower normal range. Medical literatures commonly state that CK-MB levels are elevated in 4 to 6 hours, peak at 10 to 24 hours, and return to normal within 3 to 4 days after an acute myocardial infarction. Classically, an increase of the myocardial-specific enzyme CK-MB is considered as the hallmark of acute myocardial infarction, and increased levels are frequently interpreted by the clinician as objective evidence of myocardial cell damage.

PRINCIPLE

Monoclonal antibody against human CK-MB were conjugated with fluorescence latex and another set of anti-human CK-MB monoclonal antibodies were coated on test line. After the sample has been applied to the test strip, the latex-labeled anti-human CK-MB monoclonal antibody will bind with the CK-MB in sample and form marked antigen-antibody complex. This complex move to the test card detection zone by capillary action. Then marked antigen-antibody complex will be captured on test line by another set of monoclonal antibody against human CK-MB resulting in purplish red streaks appear on the test line. The color intensity of test line increases in proportion to the amount of CK-MB in sample.

Insert test card into Getein1100 Immunofluorescence Quantitative Analyzer/Getein1600 Immunofluorescence Quantitative Analyzer (hereafter referred to as Getein1100 and Getein1600), the concentrations of CK-MB in sample will be determined and displayed on the screen. The value will be stored in Getein1100/Getein1600 and available for downloading. The result can be easily transmitted to LIS and HIS.

CONTENTS

1.A kit for Getein1100 contains:

Getein CK-MB test card in a sealed pouch with desiccant.....25
Disposable pipet.....25
User manual.....1
SD card/ RFID card.....1
Whole blood buffer.....1

2.A kit for Getein1600 contains:

Sealed cartridge with 24/48 Getein CK-MB test cards.....2
User manual.....1
Package specifications:
2×24 tests/kit, 2×48 tests/kit
Materials required for Getein1600:
Sample diluent.....1
Box with pipette tips.....1
Mixing plate.....1

3.Sample diluent/Whole blood buffer composition:

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

4.A test card consists of:

A plastic shell and a reagent strip which is composed of a sample pad, a colloidal gold pad (coated with fluorescence latex-labeled anti-human CK-MB monoclonal antibodies), nitrocellulose membrane with test line (the test line is coated with another anti-human CK-MB monoclonal antibody, and the control line is coated with rabbit anti-mouse IgG antibody), absorbent paper and liner.

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

APPLICABLE DEVICE

Getein1100 Immunofluorescence Quantitative Analyzer
Getein1600 Immunofluorescence Quantitative Analyzer

STORAGE AND STABILITY

Store the test card at 4~30℃ with a valid period of 24 months.
Use the test card for Getein1100 within 1 hour once the foil pouch is opened.
Use the test card for Getein1600 within 24 hours once opened.
Store the sample diluent/whole blood buffer at 0~30℃ with a valid period of 24 months.
Store the sample diluent/whole blood buffer at 2~8℃ 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 or the cartridge is damaged.
5.Do not open pouches or the cartridge 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

1.This test can be used for ***serum, plasma and whole blood*** samples.***Heparin and sodium citrate*** can 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.
3.Serum or plasma can be used directly. For whole blood sample, one drop of 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℃ or stored at -20℃ for 6 months before testing (whole blood sample may be stored up to 3 days at 2~8℃).
5.Refrigerated or frozen sample should reach room temperature and be homogeneous before testing. Avoid multiple freeze-thaw cycles.
6.Do not use heat-inactivated samples.
7.***SAMPLE VOLUME (for Getein1100): 100 µl.***

TEST PROCEDURE

1.Collect specimens according to user manual.
2.Test card, sample and reagent should be brought to room temperature before testing.

For Getein1100:

3.Confirm SD card or RFID card lot No. in accordance with test kit lot No.. Perform "SD card or RFID card Calib" calibration when necessary.
4.Enter testing interface of Getein1100.
5.Remove the test card from the sealed pouch immediately before use. Label the test card with patient or control identification.
6.Put the test card on a clean table, horizontally placed.
7.Using sample transfer pipette, deliver 100 µl of sample (or 3~4 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 100 µl sample on the test card).
8.***Reaction time: 10 minutes.*** Insert the test card into Getein1100 and start test after reaction time is elapsed. The result will be shown on the screen and printed automatically.

For Getein1600:

9.Each cartridge for Getein1600 contains a specific RFID card which can calibrate automatically.
10.Place samples in the designed area of the sample holder, insert the holder and select the right test item, Getein1600 will do the testing and print the result automatically.

Notes:

1.It is required to perform "SD Card or RFID card Calib" calibration when using a new batch of kits.
2.It is suggested to calibrate once for one batch of kits for Getein1100.
3.Make sure the test card insertion is correct and complete.

TEST RESULTS

Getein1100/Getein1600 can scan the test card automatically and display the result on the screen. For additional information, please refer to the user manual of Getein1100/Getein1600.

EXPECTED VALUE

The expected normal value for CK-MB was determined by testing samples from 500 apparently healthy individuals. The 99th percentile of the concentration for CK-MB is 5.0 ng/ml. CK-MB concentration less than 5.0 ng/ml can be estimated as normal.
It is recommended that each laboratory establish its own expected values for the population it serves.

PERFORMANCE CHARACTERISTICS

Measuring Range	2.5~80.0 ng/ml
Lower Detection Limit	≤ 2.5ng/ml
Within-Run Precision (n=10)	≤10%
Between-Run Precision	≤15%

Method Comparison:

The assay was compared with ROCHE E170 and its matching CK-MB test kits with 200 serum samples. The correlation coefficient (r) for CK-MB is 0.982.

LIMITATIONS

1.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.
2.Samples containing interferents may influence the results. The table below listed the maximum allowance of these potential interferents.

Interferent	Hemoglobin	Triglyceride	Bilirubin
Concentration (Max)	5 g/L	10 g/L	0.2 g/L

REFERENCES

1.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.
2.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).
3.EN ISO 18113-1:2011 In vitro diagnostic medical devices - Information supplied by the manufacturer (labeling) - Part 1: Terms, definitions and general requirements.
4.EN ISO 18113-2:2011 In vitro diagnostic medical devices - Information supplied by the manufacturer (labeling) - Part 2: In vitro diagnostic reagents for professional use (ISO18113-2:2011).

DESCRIPTION OF SYMBOLS USED

The following graphical symbols used in or found on CK-MB Fast Test Kit (Immunofluorescence Assay) 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
	Do not reuse		Date of manufacture
	Consult instructions for use	LOT	Batch code
	Temperature limitation	IVD	*In vitro* diagnostic medical device
	Sufficient for	EC REP	Authorized representative in the European Community
CE	CE mark		Do not use if package is damaged

Thank you for purchasing CK-MB Fast Test Kit (Immunofluorescence Assay).
Please read this user manual carefully before operating to ensure proper use.

Version: WIF28-S-01

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Cardiac Troponin I
Fast Test Kit
(Immunofluorescence Assay)

User Manual

Getein1100: Cat.# IF1001
Getein1600: Cat.# IF2001

INTENDED USE

Cardiac Troponin I Fast Test Kit (Immunofluorescence Assay) is intended for *in vitro* 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 regulatory proteins: T, which connects the troponin complex and tropomyosin (another cardiac muscle regulatory protein); I, which prevents muscle contraction in the absence of calcium; 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 cTnI contains an additional N-terminal sequence and is highly specific for myocardium.

Clinical studies have demonstrated the release of cTnI into the blood stream within hours following acute myocardial infarction (AMI) or ischemic damage. Elevated levels of cTnI 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, cTnI 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 fluorescence latex and another anti-human cTnI monoclonal antibody coated on the test line. After the sample has been applied to the test strip, the fluorescence latex-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. The fluorescence intensity of the test line increases in proportion to the amount of cTnI in sample.

Then insert test card into Getein1100 Immunofluorescence Quantitative Analyzer/Getein1600 Immunofluorescence Quantitative Analyzer (hereinafter referred to as Getein1100 and Getein1600), the concentration of cTnI in sample will be measured and displayed on the screen. The value will be stored in Getein1100/Getein1600 and available for downloading. The result can be easily transmitted to the laboratory or hospital information system.

CONTENTS

1. A kit for Getein1100 contains:
   Getein cTnI test card in a sealed pouch with desiccant 25
   Disposable pipet 25
   Whole blood buffer 1
   SD card 1
   User manual 1
2. A kit for Getein1600 contains:
   Sealed cartridge with 24/48 Getein cTnI test cards 2
   User manual 1
   Package specifications:
   2×24 tests/kit, 2×48 tests/kit
   Materials required for Getein1600:
   Sample diluent 1
   Box with pipette tips 1
   Mixing plate 1
3. Sample diluent/Whole blood buffer composition:
   Phosphate buffered saline, proteins, detergent, preservative, stabilizer.
4. A test card consists of:
   A plastic shell and a reagent strip which is composed of a sample pad, nitrocellulose membrane (one end of the membrane is coated with a fluorescence latex-labelled anti-human cTnI monoclonal antibody, the test line is coated with another anti-human cTnI monoclonal antibody, and the control line is coated with rabbit anti-mouse IgG antibody), absorbent paper and liner.

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

APPLICABLE DEVICE

Getein1100 Immunofluorescence Quantitative Analyzer
Getein1600 Immunofluorescence Quantitative Analyzer

STORAGE AND STABILITY

Store the test card at 4~30℃ with a valid period of 24 months. Use the test card for Getein1100 within 1 hour once the foil pouch is opened.

For test card of Getein1600: if the cartridge is opened, it could be stable within 24 hours once exposed to air. If the test cards can't be used up at a time, please put the cartridge back to the foil pouch and reseal along the entire edge of zip-seal. The remaining test cards should be used up within 7 days.

Store the sample diluent/whole blood buffer at 0~30℃ with a valid period of 24 months.

Store the sample diluent/whole blood buffer at 2~8℃ 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 or the cartridge is damaged.
5. Do not open pouches or the cartridge 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

1. This test can be used for ***serum, plasma and whole blood samples. Heparin and 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.
3. Serum or plasma can be used directly. For whole blood sample, one drop of 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℃ or stored at -20℃ for 6 months before testing (whole blood sample may be stored up to 3 days at 2~8℃).
5. Refrigerated or frozen sample should reach room temperature and be homogeneous before testing. Avoid multiple freeze-thaw cycles.
6. Do not use heat-inactivated samples.
7. SAMPLE VOLUME *(for Getein1100): 100 µl*.

TEST PROCEDURE

1. Collect specimens according to user manual.
2. Test card, sample and reagent should be brought to room temperature before testing.

For Getein1100:

3. Confirm SD card lot No. in accordance with test kit lot No.. Perform “SD Card Calib” calibration when necessary (Details refer to 8.5.2 of Getein1100 User Manual).
4. On the main interface of Getein1100, press "ENT" button to enter testing interface.
5. Remove the test card from the sealed pouch immediately before use. Label the test card with patient or control identification.
6. Put the test card on a clean table, horizontally placed.
7. Using sample transfer pipette, deliver *100 µl* of sample (or 3~4 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 100 µl sample on the test card).
8. *Reaction time: 10 minutes.* Insert the test card into Getein1100 and press "ENT" button after reaction time is elapsed. The result will be shown on the screen and printed automatically.

For Getein1600:

9. Each cartridge for Getein1600 contains a specific RFID card which can calibrate automatically.
10. Place samples in the designed area of the sample holder, insert the holder and select the right test item, Getein1600 will do the testing and print the result automatically.

Notes:

1. It is required to perform “SD Card Calib” calibration when using a new batch of kits.
2. It is suggested to calibrate once for one batch of kits for Getein1100.
3. Make sure the test card and the sample insertion is correct and complete.

TEST RESULTS

Getein1100/Getein1600 can scan the test card automatically and display the result on the screen. For additional information, please refer to the user manual of Getein1100/Getein1600.

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 0.1 ng/ml. (The probability that value of a normal person below 0.1 ng/ml is 99%.)
It is recommended that each laboratory establish its own expected values for the population it serves.

PERFORMANCE CHARACTERISTICS

Measuring Range	0.1~50 ng/ml
Lower Detection Limit	≤ 0.1 ng/ml
Within-Run Precision	≤10%
Between-Run Precision	≤15%

Method Comparison:

The assay was compared with SIEMENS IMMULITE 2000 and its matching cTnI test kits with 200 serum samples (60 positive samples and 140 negative samples). The correlation coefficient (r) for cTnI is 0.952.

LIMITATIONS

1. 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.
2. Samples containing interferents may influence the results. The table below listed the maximum allowance of these potential interferents.

Interferent	Hemoglobin	Triglyceride	Bilirubin
Concentration (Max)	5 g/L	10 g/L	0.2 g/L

REFERENCES

1. 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.
2. 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).
3. EN ISO 18113-1:2009 *In vitro* diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 1: Terms, definitions and general requirements.
4. EN ISO 18113-2:2009 *In vitro* diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 2: *In vitro* diagnostic reagents for professional use (ISO 18113-2:2009).

DESCRIPTION OF SYMBOLS USED

The following graphical symbols used in or found on Cardiac Troponin I Fast Test Kit (Immunofluorescence Assay) 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 15223-1:2007.

Key to symbols used			
	Manufacturer		Expiration date
	Do not reuse		Date of manufacture
	Consult instructions for use	LOT	Batch code
	Temperature limitation	IVD	*In vitro* diagnostic medical device
Σ	Sufficient for	EC REP	Authorized representative in the European Community
CE	CE mark		Do not use if package is damaged

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

Version: WIF02-S-02

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CE IVD

PCT

Fast Test Kit

(Immunofluorescence Assay)

User Manual

Getein1100: Cat.# IF1007
Getein1600: Cat.# IF2007

INTENDED USE

PCT Fast Test Kit (Immunofluorescence Assay) is intended for *in vitro* quantitative determination of Procalcitonin (PCT) in serum, plasma or whole blood. The test is used as an aid in the assessment and evaluation of patients suspected of bacterial infection, trauma or shock.

SUMMARY

PCT is a peptide precursor of the hormone calcitonin, the latter being involved with calcium homeostasis. It is composed of 116 amino acids and is produced by parafollicular cells (C cells) of the thyroid and by the neuroendocrine cells of the lung and the intestine.
Measurement of PCT can be used as a marker of severe sepsis and generally grades well with the degree of sepsis, although levels of PCT in the blood are very low. PCT has the greatest sensitivity and specificity for differentiating patients with systemic inflammatory response syndrome (SIRS) from those with sepsis.
PCT levels may be useful to distinguish bacterial infections from nonbacterial infections. It has shown that PCT may help guide therapy and reduce antibiotic use, which can help save on cost of antibiotic prescriptions and drug resistance.

PRINCIPLE

The test uses an anti-human PCT monoclonal antibody conjugated with fluorescence latex. For PCT product, test line 1 was coated with anti-human PCT polyclonal antibody and test line 2 was coated with another anti-human PCT monoclonal antibody. After the sample has been applied to the test strip, the fluorescence latex-labelled anti-human PCT monoclonal antibody binds with the PCT 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 other anti-human PCT monoclonal antibody or the polyclonal antibody. The fluorescence intensity of the test line increases in proportion to the amount of PCT in sample.
Then insert test card into Getein1100 Immunofluorescence Quantitative Analyzer/Getein1600 Immunofluorescence Quantitative Analyzer (hereinafter referred to as Getein1100 and Getein1600), the concentration of PCT in sample will be measured and displayed on the screen. The value will be stored in Getein1100/Getein1600 and available for downloading. The result can be easily transmitted to the laboratory or hospital information system.

CONTENTS

1. A kit for Getein1100 contains:
   Getein PCT test card in a sealed pouch with desiccant 25
   Disposable pipet 25
   Whole blood buffer 1
   SD card 1
   User manual 1
2. A kit for Getein1600 contains:
   Sealed cartridge with 24/48 Getein PCT test cards 2
   User manual 1
   Package specifications:
   2×24 tests/kit, 2×48 tests/kit
   Materials required for Getein1600:
   Sample diluent 1
   Box with pipette tips 1
   Mixing plate 1
3. Sample diluent/Whole blood buffer composition:
   Phosphate buffered saline, proteins, detergent, preservative, stabilizer.
4. A test card consists of:
   A plastic shell and a reagent strip which is composed of a sample pad, fluorescence latex pad, nitrocellulose membrane (one end of the membrane is coated with a fluorescence latex-labelled anti-human PCT monoclonal antibody, the test line are coated with another anti-human PCT monoclonal antibody and polyclonal antibody, and the control line is coated with rabbit anti-mouse IgG antibody), absorbent paper and liner.

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

APPLICABLE DEVICE

Getein1100 Immunofluorescence Quantitative Analyzer
Getein1600 Immunofluorescence Quantitative Analyzer

STORAGE AND STABILITY

Store the test card at 4~30℃ with a valid period of 24 months. Use the test card for Getein1100 within 1 hour once the foil pouch is opened.
For test card of Getein1600: if the cartridge is opened, it could be stable within 24 hours once exposed to air. If the test cards can't be used up at a time, please put the cartridge back to the foil pouch and reseal along the entire edge of zip-seal. The remaining test cards should be used up within 7 days.
Store the sample diluent/whole blood buffer at 0~30℃ with a valid period of 24 months.
Store the sample diluent/whole blood buffer at 2~8℃ 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 or the cartridge is damaged.
5. Do not open pouches or the cartridge 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 the manual to ensure proper test performance.

SPECIMEN COLLECTION AND PREPARATION

1. This test can be used for ***serum, plasma and whole blood samples. Heparin and 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.
3. Serum or plasma can be used directly. For whole blood sample, one drop of 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℃ or stored at -20℃ for 6 months before testing (whole blood sample may be stored up to 3 days at 2~8℃).
5. Refrigerated or frozen sample should reach room temperature and be homogeneous before testing. Avoid multiple freeze-thaw cycles.
6. Do not use heat-inactivated samples.
7. SAMPLE VOLUME ***(for Getein1100): 100 µl***.

TEST PROCEDURE

1. Collect specimens according to user manual.
2. Test card, sample and reagent should be brought to room temperature before testing.

For Getein1100:

3. Confirm SD card lot No. in accordance with test kit lot No.. Perform “SD Card Calib” calibration when necessary (Details refer to 8.5.2 of Getein1100 User Manual).
4. On the main interface of Getein1100, press "ENT" button to enter testing interface.
5. Remove the test card from the sealed pouch immediately before use. Label the test card with patient or control identification.
6. Put the test card on a clean table, horizontally placed.
7. Using sample transfer pipette, deliver ***100 µl*** of sample (or 3~4 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 100 µl sample on the test card).
8. ***Reaction time: 15 minutes.*** Insert the test card into Getein1100 and press "ENT" button after reaction time is elapsed. The result will be shown on the screen and printed automatically.

For Getein1600:

9. Each cartridge for Getein1600 contains a specific RFID card which can calibrate automatically.
10. Place samples in the designed area of the sample holder, insert the holder and select the right test item, Getein1600 will do the testing and print the result automatically.

Notes:

1. It is required to perform “SD Card Calib” calibration when using a new batch of kits.
2. It is suggested to calibrate once for one batch of kits for Getein1100.
3. Make sure the test card and the sample insertion is correct and complete.

TEST RESULTS

Getein1100/Getein1600 can scan the test card automatically and display the result on the screen. For additional information, please refer to the user manual of Getein1100/Getein1600.

EXPECTED VALUE

The expected normal value for PCT was determined by testing samples from 500 apparently healthy individuals. The 99th percentile of the concentration for PCT is 0.1 ng/ml. (The probability that value of a normal person below 0.1 ng/ml is 99%.) The table below comes from the research of ACCP/SCCM (American College of Chest Physicians/Society of Critical Care Medicine), showing the PCT value and its clinical meaning [4]:

PCT concentration	Clinical significance
< 0.5 ng/ml	Local bacterial infection is possible, systemic infection (sepsis) is not likely.
≥ 0.5 and < 2.0 ng/ml	Systemic infection (sepsis) is possible, a moderate risk of severe sepsis and/or septic shock.
≥ 2.0 ng/ml	Systemic infection (sepsis) is likely, a high risk of severe sepsis and/or septic shock.

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

PERFORMANCE CHARACTERISTICS

Measuring Range	0.1~50.0 ng/ml
Lower Detection Limit	≤0.1 ng/ml
Within-Run Precision	≤10%
Between-Run Precision	≤15%

Method Comparison:

The assay was compared with Roche MODULAR ANALYTICS E170 automatic immunoassay system and its matching PCT test kits with 200 serum samples (68 positive samples and 132 negative samples). The correlation coefficient (r) for PCT is 0.983.

LIMITATIONS

1. 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.
2. Samples containing interferent may influences the results. The table below listed the maximum allowance of these potential interferents.

Interferent	Hemoglobin	Triglyceride	Bilirubin
Concentration (Max)	5 g/L	10 g/L	0.2 g/L

REFERENCES

1. Balcl C, Sungurtekin H, Gürses E, Sungurtekin U, Kaptanoglu B. Usefulness of procalcitonin for diagnosis of sepsis in the intensive care unit, Crit Care. 2003 February 7 (1):85~90.
2. Schuetz P, Christ-Crain M, Thomann R, et al. Effect of procalcitonin-based guidelines vs standard guidelines on antibiotic use in lower respiratory tract infections: the ProHOSP randomized controlled trial. JAMA. Sep 9 2009; 302(10):1059-66.
3. Briel M, Schuetz P, Mueller B, et al. Procalcitonin-guided antibiotic use vs a standard approach for acute respiratory tract infections in primary care. Arch Intern Med. Oct 13 2008; 168(18):2000-7; discussion 2007-8.
4. Meisner M. Procalcitonin (PCT) - A New innovative infection parameter. Biochemical and clinical aspects. Thieme Stuttgart, New York 2000, ISBN: 3-13-105503-0.
5. EN ISO 18113-1:2009 *In vitro* diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 1: Terms, definitions and general requirements.
6. EN ISO 18113-2:2009 *In vitro* diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 2: *In vitro* diagnostic reagents for professional use (ISO 18113-2:2009).

DESCRIPTION OF SYMBOLS USED

The following graphical symbols used in or found on PCT Fast Test Kit (Immunofluorescence Assay) 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 15223-1:2007.

Key to symbols used			
	Manufacturer		Expiration date
	Do not reuse		Date of manufacture
	Consult instructions for use	LOT	Batch code
	Temperature limitation	IVD	*In vitro* diagnostic medical device
	Sufficient for	EC REP	Authorized representative in the European Community
	CE mark		Do not use if package is damaged

Thank you for purchasing PCT Fast Test Kit (Immunofluorescence Assay). Please read this user manual carefully before operating to ensure proper use.

Version: WIF06-S-02

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Website: www.bio-GP.com.cn

STATEMENT

We, Zhejiang Orient Gene Biotech Co., Ltd , having a registered office at 3787#, East Yangguang Avenue, Dipu Street Anji 313300, Huzhou, Zhejiang, China assign SRL SANMEDICO having a registered office at A. Corobceanu street 7A, apt. 9, Chişinău MD-2012, Moldova, as exclusive authorized representative for Orient Gene Brand product in correspondence with the conditions of directive 98/79/EEC in Moldova only. The detailed product list is in the Annex 1 in the following pages.

We declare that the company mentioned above is authorized to register, notify, renew or modify the registration of medical devices on the territory of the Republic of Moldova.

This Statement letter will be valid from Mar.10th,2025to Mar.09th, 2027.

Zhejiang Orient Gene Biotech Co., Ltd

General Manager:

Date:2025/3/10

Annex 1

Numărul de catalog (referință)*	**Denumire generică (denumirea dispozitivului)**	**Denumire comercială (brand)***	**Modelul**
GCCOV-702a-H1	TEST RAPID	Orient Gene	Rapid COVID-19 Antigen Oral Fluid Self-Test
GCCOV-702a-H5	TEST RAPID	Orient Gene	Rapid COVID-19 Antigen Oral Fluid Self-Test
GCCOV-702a-H20	TEST RAPID	Orient Gene	Rapid COVID-19 Antigen Oral Fluid Self-Test
GCCOV-502a-H1OGE	TEST RAPID	Orient Gene	Rapid COVID-19 (Antigen) Self-test
GCCOV-502a-H5OGE	TEST RAPID	Orient Gene	Rapid COVID-19 (Antigen) Self-test
GCCOV-502a-H20OGE	TEST RAPID	Orient Gene	Rapid COVID-19 (Antigen) Self-test
GIHSA-102a	TEST RAPID	Orient Gene	One Step Microalbumin Test Cassette
GIHSA-101a	TEST RAPID	Orient Gene	One Step Microalbumin Test Strip (Urine)
GCROA-602a	TEST RAPID	Orient Gene	Rotavirus rapid test cassette (feces)
GCMAL(pf/pv)-402a	TEST RAPID	Orient Gene	Malaria P.f./P.v. Ag Rapid Test Cassette (Whole Blood)
GCROA/ADE-602a	TEST RAPID	Orient Gene	Rotavirus and Adenovirus Combo Rapid Test Cassette (Feces)
GASPE-902a	TEST RAPID	Orient Gene	Male Fertility Rapid Test Cassette (Semen)
GAFSH-101a	TEST RAPID	Orient Gene	One Step Menopause Test Strip (Urine)
GAFSH-102a	TEST RAPID	Orient Gene	One Step Menopause Test Cassette (Urine)
GAIGF1-502a	TEST RAPID	Orient Gene	iGFBP-1 Rapid test Cassette (Swab)

GAIGF1-501a	TEST RAPID	Orient Gene	iGFBP-1 Rapid Test Strip (Cervical Secretion)
GALH-101a	TEST RAPID	Orient Gene	One Step Ovulation Test Strip (Urine) (25mIU)
GALH-101b	TEST RAPID	Orient Gene	One Step Ovulation Test Strip (Urine) (40mIU)
GALH-102a	TEST RAPID	Orient Gene	One Step Ovulation Test Cassette (Urine) (25mIU)
GALH-102b	TEST RAPID	Orient Gene	One Step Ovulation Test Cassette (Urine) (40mIU)
GCTYP-302a	TEST RAPID	Orient Gene	Typhoid IgG/IgM Rapid Test Cassette (serum/plasma)
GCMAL(pf/pan)-402a	TEST RAPID	Orient Gene	Malaria P.f./Pan Ag Rapid Test Cassette (Whole Blood)
GCDEN-425a	TEST RAPID	Orient Gene	Dengue NS1+IgM/IgG Combo Rapid Test Cassette (Whole blood/serum/plasma)
GCDEN(NS)-402c	TEST RAPID	Orient Gene	Dengue NS1 Antigen Rapid Test Cassette (Whole blood/serum/plasma)
GCDEN(ab)-402c	TEST RAPID	Orient Gene	Dengue IgM/IgG Rapid Test Cassette (Whole blood/serum/plasma)
GCVCH(O1/O9)-602a	TEST RAPID	Orient Gene	V.cholerae O1/O139 Ag Combo Rapid Test Cassette (Feces)
GCMAL(pf)-402a	TEST RAPID	Orient Gene	Malaria Pf Ag Rapid Test Cassette (Whole blood)
GCSAL(ST)-602a	TEST RAPID	Orient Gene	S. typhi Ag Rapid Test Cassette (Serum/plasma/Feces)
GCCHK(IgM)-402a	TEST RAPID	Orient Gene	Chikungunya IgM Rapid Test Cassette (Whole blood/Serum/Plasma)
GCCOV-502a-NN	TEST RAPID	Orient Gene	Coronavirus Ag Rapid Test Cassette (Swab)
GCCOV (Nab)-402b	TEST RAPID	Orient Gene	SARS-CoV-2 Neutralizing Antibody Rapid Test Cassette (Whole blood/Serum/Plasma)
GCCOV-502a-NA	TEST RAPID	Orient Gene	Coronavirus Ag Rapid Tests Cassette (Swab)

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GCCOV (Ag)-PN10	TEST RAPID	Orient Gene	COVID-19 Antigen Control Kit
GCCOV (Ag)-PN20	TEST RAPID	Orient Gene	COVID-19 Antigen Control Kit
GCFCRA-545a	TEST RAPID	Orient Gene	Flu, COVID-19,RSV&Adeno Ag Combo Tests Cassette (Swab)
GCTV-502a	TEST RAPID	Orient Gene	Trichomonas Ag Rapid Test Cassette (Swab)
GCVCH(O1)-602a	TEST RAPID	Orient Gene	V.cholerae O1 Ag Rapid Test Cassette (Feces)
GCCHA-402a	TEST RAPID	Orient Gene	Chagas Ab Rapid Test Cassette (Whole blood/serum/plasma)
GCMAL(pf/pv Ab)-302a	TEST RAPID	Orient Gene	Malaria Pf/Pv Ab Rapid Test Cassette (Serum/plasma)
GCMAL(pf/pv Ab)-402a	TEST RAPID	Orient Gene	Malaria Pf/Pv Ab Rapid Test Cassette (Whole blood/Serum/plasma)
GCMKP-502b	TEST RAPID	Orient Gene	Monkeypox Ag Rapid Test Cassette (Swab)
GCCOV(Del)-T502a	TEST RAPID	Orient Gene	SARS-CoV-2 Delta-series Mutant Strain Ag Rapid Test cassette (Swab)
GCCOV-PN10	TEST RAPID	Orient Gene	COVID-19 IgG/IgM Control kit
GCCOV-PN20	TEST RAPID	Orient Gene	COVID-19 IgG/IgM Control kit
GCFCR-T525a	TEST RAPID	Orient Gene	COVID-19/Flu A&B/ RSV Ag Combo Rapid Test Cassette (Swab)
GCCOV(B117)-525a	TEST RAPID	Orient Gene	COVID-19 Ag&B.1.1.7 Mutant Strain Combo Test Cassette (Swab)
GCFCRA-T525a	TEST RAPID	Orient Gene	COVID-19/Flu A&B/ RSV/Adeno Ag Combo Rapid Test Cassette (Swab)
GCCOV-702a	TEST RAPID	Orient Gene	COVID-19 Ag Rapid Test Cassette (Oral fluid)
GCFC-T502a	TEST RAPID	Orient Gene	COVID-19/Flu A&B Ag Combo Rapid Test Cassette (Swab)

GCMKP-402a	TEST RAPID	Orient Gene	Monkeypox IgG/IgM Rapid Test Cassette (Whole blood/serum/plasma)
GCKal-401a	TEST RAPID	Orient Gene	Leishmania Ab Rapid Test strip (Whole blood/serum/plasma)
GCKal-T402a	TEST RAPID	Orient Gene	Leishmania IgG/IgM Rapid test cassette (whole blood/serum/plasma)
GCCOV-503a	TEST RAPID	Orient Gene	Smart Rapid COVID-19 Ag Test Device
GCBRU-402a	TEST RAPID	Orient Gene	Brucella Antibody Rapid Test Cassette (Whole blood/serum/plasma)
GCCHA-302a	TEST RAPID	Orient Gene	Chagas Ab Rapid Test Cassette (Serum/plasma)
GCCHK(IgM)-302a	TEST RAPID	Orient Gene	Chikungunya IgM Rapid Test Cassette (Serum/Plasma)
GCCOV-501a	TEST RAPID	Orient Gene	Rapid COVID-19 Antigen Test Strip
GCMON-352a	TEST RAPID	Orient Gene	Mononucleosis IgG/IgM Rapid Test Cassette (Serum/plasma)
GCMON-402a	TEST RAPID	Orient Gene	Mononucleosis Rapid Test Cassette (Whole blood/Serum/plasma)
GCMON-425a	TEST RAPID	Orient Gene	Mononucleosis IgG/IgM Rapid Test Cassette (Whole blood/Serum/plasma)
GCEV71 (IgM)-302a	TEST RAPID	Orient Gene	EV71 IgM Rapid Test Cassette (Serum/plasma)
GCEV71 (IgM)-402a	TEST RAPID	Orient Gene	EV71 IgM Rapid Test Cassette (Whole blood/Serum/plasma)
GENMP22-102a	TEST RAPID	Orient Gene	One Step Nuclear Matrix Protein 22 Test Cassette (Urine)
GEFOB/TF-602a	TEST RAPID	Orient Gene	Fecal Occult Blood and Transferrin Combo Rapid Test Cassette (Feces)
GCHEV-302a	TEST RAPID	Orient Gene	HEV IgM Rapid Test Cassette (Serum/Plasma)
GCMP (IgM)-302a	TEST RAPID	Orient Gene	M.pneumonia IgM Rapid Test Cassette (Serum/plasma)

FCCOV-502a	TEST RAPID	Orient Gene	SARS-CoV-2 Ag Fluorescence Rapid Test Cassette (Swab)
GCCOV-402Ba	TEST RAPID	Orient Gene	COVID-19 IgG/IgM Rapid test cassette (whole blood/serum/plasma)
GCCOV-402a	TEST RAPID	Orient Gene	COVID-19 IgG/IgM Rapid test cassette (whole blood/serum/plasma)
GCCOV-502a	TEST RAPID	Orient Gene	Coronavirus Ag Rapid Test Cassette (Swab)
GCFC-T503a	TEST RAPID	Orient Gene	Smart Rapid COVID-19 &Flu A/B Ag Test Device
GAHCG-101a	TEST RAPID	Orient Gene	One step pregnancy test strip (urine)
GAHCG-101d	TEST RAPID	Orient Gene	One step pregnancy test strip (urine)
GAHCG-101b	TEST RAPID	Orient Gene	One step pregnancy test strip (urine)
GAHCG-102a	TEST RAPID	Orient Gene	One step pregnancy test cassette (urine)
GAHCG-102d	TEST RAPID	Orient Gene	One step pregnancy test cassette (urine)
GAHCG-102b	TEST RAPID	Orient Gene	One step pregnancy test cassette (urine)

GEFOB-602c	TEST RAPID	Orient Gene	Fecal Occult Blood Rapid Test Cassette (Feces)
GEFOB-602b	TEST RAPID	Orient Gene	Fecal Occult Blood Rapid Test Cassette (Feces)
GEFOB-601c	TEST RAPID	Orient Gene	Fecal Occult Blood Rapid Test Strip (Feces)
GEFOB-601b	TEST RAPID	Orient Gene	Fecal Occult Blood Rapid Test Strip (Feces)
GECEA-402a	TEST RAPID	Orient Gene	Carcinoembryonic Antigen Rapid Test Cassette (Whole blood/serum/plasma)

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GECEA-401a	TEST RAPID	Orient Gene	Carcinoembryonic Antigen Rapid Test Strip (Whole blood/serum/plasma)
GETF-602a	TEST RAPID	Orient Gene	Transferrin Rapid Test Cassette (Feces)
GETF-601a	TEST RAPID	Orient Gene	Transferrin Rapid Test Strip (Feces)
GEAFP-401a	TEST RAPID	Orient Gene	Alpha-Fetoprotein Rapid Test Strip (Whole blood/serum/plasma)
GEAFP-402a	TEST RAPID	Orient Gene	Alpha-Fetoprotein Rapid Test Cassette (Whole blood/serum/plasma)
GIHSA-101a	TEST RAPID	Orient Gene	One step microalbumin test strip (urine)
GIHSA-102a	TEST RAPID	Orient Gene	One step microalbumin test cassette (urine)
GDCAR-335a	TEST RAPID	Orient Gene	Myoglobin/CK-MB/Troponin I Combo Test Cassette (Serum/plasma)
GDCKM-302a	TEST RAPID	Orient Gene	One step CK-MB Test Cassette (Serum/Plasma)
GDCKM-402a	TEST RAPID	Orient Gene	CK-MB Rapid Test Cassette (Whole blood/serum/plasma)
GDCRP-402a	TEST RAPID	Orient Gene	C-Reactive Protein Semi-Quantitative Rapid Test Cassette (Whole Blood/serum/plasma)
GDTRO-302a	TEST RAPID	Orient Gene	Troponin I Rapid Test Cassette (Serum/Plasma)
GDTRO-402a	TEST RAPID	Orient Gene	Troponin I Rapid Test Cassette (Whole blood/Serum/Plasma) **(Except the tender No. ocds-b3wdp1-MD-1722410248839 din 05.09.2024, limited to the quantity 28060 pcs only, as per the tender)**
GDTRO-402b	TEST RAPID	Orient Gene	Troponin I Rapid Test Cassette (Whole blood/Serum/Plasma)

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GDMYO-402a	TEST RAPID	Orient Gene	Myoglobin Rapid Test Cassette (Whole blood/serum/plasma)
GDCAR-W435a	TEST RAPID	Orient Gene	Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (whole blood/Serum/plasma)
GDPCT-402a	TEST RAPID	Orient Gene	Procalcitonin Rapid Test Cassette (Whole blood/serum/plasma)
GDPCT-T402a	TEST RAPID	Orient Gene	Procalcitonin Semi-Quantitative Rapid Test Cassette (Whole blood/serum/plasma)
GDPCT-T401a	TEST RAPID	Orient Gene	Procalcitonin Semi-Quantitative Rapid Test Strip (Whole blood/serum/plasma)
FDPCT -302a	TEST RAPID	Orient Gene	Procalcitonin Rapid Test Kit (serum/plasma)
GDDDI-402b	TEST RAPID	Orient Gene	D-Dimer Rapid Test Cassette (Whole blood/plasma)
FDCAR-T302a	TEST RAPID	Orient Gene	Troponin I/CK-MB/Myoglobin Fluorescence Combo Test Kit (Serum/plasma)
FDTRO-302a	TEST RAPID	Orient Gene	Troponin I Fluorescence Rapid Test Kit (Serum/plasma)
FDBNP-302a	TEST RAPID	Orient Gene	NT-ProBNP Fluorescence Rapid Test Kit (Serum/plasma)
FDCRP-402a	TEST RAPID	Orient Gene	C-Reactive Protein Rapid Test Kit (Whole blood/serum/plasma)
GDCKM-402a	TEST RAPID	Orient Gene	CK-MB Rapid Test Cassette (whole blood/serum/plasma)
GAHCG-201a	TEST RAPID	Orient Gene	One step pregnancy test strip (Urine/serum)
GAHCG-202a	TEST RAPID	Orient Gene	One step pregnancy test cassette (Urine/serum)
GAHCG-201b	TEST RAPID	Orient Gene	One step pregnancy test strip (Urine/serum)
GAHCG-202b	TEST RAPID	Orient Gene	One step pregnancy test cassette (Urine/serum)
GCHAV(IgM)-302Ba	TEST RAPID	Orient Gene	HAV IgM Rapid Test Cassette (Serum/plasma)
GCHAV-602a	TEST RAPID	Orient Gene	HAV Ag Rapid Test Cassette (Feces)

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GCHAV(IgG/IgM) -302a	TEST RAPID	Orient Gene	HAV IgG/IgM Rapid Test Cassette (Serum/plasma)
GCHSV(IgG)-402a	TEST RAPID	Orient Gene	HSV IgG Rapid Test Cassette (Whole blood/serum/plasma)
GCHSV(IgM)-302a	TEST RAPID	Orient Gene	HSV IgM Rapid test Cassette (serum/plasma)
GCHP-601a	TEST RAPID	Orient Gene	H.pylori Ag Rapid Test Strip (feces)
GCHP-602a	TEST RAPID	Orient Gene	H.pylori Ag Rapid Test Cassette(feces)
GCTB-302a	TEST RAPID	Orient Gene	Tuberculosis IgG/IgM Rapid Test Cassette (serum/plasma)
GCTB-402a	TEST RAPID	Orient Gene	Tuberculosis IgG/IgM Rapid Test Cassette (whole blood/serum/plasma)
GCFLU(A/B)-501a	TEST RAPID	Orient Gene	Influenza A&B Ag Rapid Test Strip (Swab)
GCFLU(A/B)-502a	TEST RAPID	Orient Gene	Influenza A&B Ag Rapid Test Cassette (Swab)
GCFLU(A/B)-502Ca	TEST RAPID	Orient Gene	Influenza A&B Ag Rapid Test Cassette (Swab)
GCFLU(A)-501a	TEST RAPID	Orient Gene	Influenza A Ag Rapid Test Strip (Swab)
GCFLU(A)-502a	TEST RAPID	Orient Gene	Influenza A Ag Rapid Test Cassette (Swab)
GCHP-301a	TEST RAPID	Orient Gene	H.Pylori Ab Rapid Test Strip (serum/plasma)
GCHP-302a	TEST RAPID	Orient Gene	H.pylori Ab Rapid Test Cassette (serum/plasma)
GCHP-401a	TEST RAPID	Orient Gene	H.pylori Ab Rapid Test Strip (Whole blood/serum/plasma)
GCHP-402a	TEST RAPID	Orient Gene	H.pylori Ab Rapid Test Cassette (Whole blood/serum/plasma)
GCCA-502a	TEST RAPID	Orient Gene	Candida albicans Antigen rapid test cassette (swab)
GCGON-502b	TEST RAPID	Orient Gene	Gonorrhea Rapid Test Cassette (Swab)
GCGIA-602a	TEST RAPID	Orient Gene	Giardia lamblia Antigen Rapid tests cassette (feces)

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GCSTR-501a	TEST RAPID	Orient Gene	Strep A Rapid Test Strip (Throat swab)
GCSTR-502a	TEST RAPID	Orient Gene	Strep A Rapid Test Cassette (Throat swab)
GCFC-525a	TEST RAPID	Orient Gene	Rapid COVID-19 + Influenza Antigen Test
GCRSV-502a	TEST RAPID	Orient Gene	RSV Antigen Rapid Test Cassette (swab)
GCADE-502a	TEST RAPID	Orient Gene	Adenovirus antigen rapid test cassette (swab)
GCADE-602a	TEST RAPID	Orient Gene	Adenovirus Rapid test cassette (feces)
GCCD(GDH)-602a	TEST RAPID	Orient Gene	Clostridium difficile Antigen GDH Rapid Test cassette (feces)
GCCD (Toxin A/B)-602a	TEST RAPID	Orient Gene	Clostridium difficile Toxin A&B rapid test cassette (feces)
GCCD-602a	TEST RAPID	Orient Gene	Clostridium difficile GDH & Toxin A/B Rapid Test Cassette (Feces)
GCHSV (IgM)-402a	TEST RAPID	Orient Gene	HSV IgM Rapid test Cassette (whole blood/serum/plasma)
GCHSV(IgG)-302a	TEST RAPID	Orient Gene	HSV IgG Rapid Test Cassette (serum/plasma)
GCSYP-301a	TEST RAPID	Orient Gene	Syphilis Ab Rapid Test Strip (serum/plasma)
GCSYP-302a	TEST RAPID	Orient Gene	Syphilis Ab Rapid Test Cassette (serum/plasma)
GCSYP-401a	TEST RAPID	Orient Gene	Syphilis Ab Rapid test strip (whole blood/serum/plasma)
GCSYP-402a	TEST RAPID	Orient Gene	Syphilis Ab Rapid test cassette (whole blood/serum/plasma)
GBBAR-101a	TEST RAPID	Orient Gene	One Step Barbiturates Test Strip (Urine)
GBBAR-102a	TEST RAPID	Orient Gene	One Step Barbiturates Test Cassette (Urine)
GBAMP-101a	TEST RAPID	Orient Gene	One Step Amphetamine Test Strip (Urine)
GBAMP-102a	TEST RAPID	Orient Gene	One Step Amphetamine Test Cassette (Urine)
GBAMP-105a	TEST RAPID	Orient Gene	One Step Amphetamine Dip Card (Urine)

GBPPX-101a	TEST RAPID	Orient Gene	One Step Propoxyphene Test Strip (Urine)
GBPPX-102a	TEST RAPID	Orient Gene	One Step Propoxyphene Test Cassette (Urine)
GBDSA-XXXXFX	TEST RAPID	Orient Gene	Oral Fluid Drug test Cube
GBDSA-XXXXEX	TEST RAPID	Orient Gene	Oral Fluid Drug test
GBDSA-XXXXFSI	TEST RAPID	Orient Gene	Oral Fluid Drug test Cube
GBDSA-XXXXCX	TEST RAPID	Orient Gene	Oral Fluid Drug test cylinder
GBOPI-102a	TEST RAPID	Orient Gene	One Step Opiate Test Cassette (Urine)
GBOPI-101a	TEST RAPID	Orient Gene	One Step Opiate Test Strip (Urine)
GBETG-101b	TEST RAPID	Orient Gene	One Step Ethyl Glucoronide Test Strip (urine)
GBETG-102b	TEST RAPID	Orient Gene	One Step Ethyl Glucoronide Test Cassette (urine)
GBMOP-101a	TEST RAPID	Orient Gene	One step Morphine Test strip (urine)
GBMOP-102a	TEST RAPID	Orient Gene	One step Morphine Test Cassette (urine)
GBMOP-105a	TEST RAPID	Orient Gene	One step Morphine Test dip card (urine)
GBTHC-101a	TEST RAPID	Orient Gene	One Step Marijuana Test Strip (Urine)
GBTHC-102a	TEST RAPID	Orient Gene	One Step Marijuana Test Cassette (Urine)
GBTHC-105a	TEST RAPID	Orient Gene	One Step Marijuana Test Dip Card (Urine)
GBMTD-101a	TEST RAPID	Orient Gene	One step Methadone Test strip (urine)
GBMTD-102a	TEST RAPID	Orient Gene	One step Methadone Test cassette (urine)
GBXXX-101	TEST RAPID	Orient Gene	One Step Drugs of Abuse Test Strip (Urine)
GBXXX-102	TEST RAPID	Orient Gene	One Step Drugs of Abuse Test Cassette (Urine)
GBXXX-105	TEST RAPID	Orient Gene	One Step Drugs of Abuse Test Dip Card (Urine)

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GBDSA-XXXXJSI	TEST RAPID	Orient Gene	Oral fluid drug test cylinder
GBDSA-XXXXJX	TEST RAPID	Orient Gene	Oral fluid drug test cylinder
GBDSA-XXXXKX	TEST RAPID	Orient Gene	Oral fluid drug test cylinder
GBDSA-XXXXMX	TEST RAPID	Orient Gene	Oral fluid drug test device
GBDSA-XXXXA/B/G/H/I	TEST RAPID	Orient Gene	Multi-drug rapid screen test cassette (oral fluid)
GBMTC-101a	TEST RAPID	Orient Gene	One Step Methcathinone Test Strip (Urine)
GBMTC-102a	TEST RAPID	Orient Gene	One Step Methcathinone Test Cassette (Urine)
GBKRA-101a	TEST RAPID	Orient Gene	One step kratom test strip (urine)
GBKRA-102a	TEST RAPID	Orient Gene	One step kratom test cassette (urine)
GBLSD-101a	TEST RAPID	Orient Gene	One Step Lysergic Acid Diethylamide Test Strip (Urine)
GBLSD-102a	TEST RAPID	Orient Gene	One Step Lysergic Acid Diethylamide Test Cassette (Urine)
FBXXX-1102	TEST RAPID	Orient Gene	Hair Multi-drug rapid test kit
GBETG-105a	TEST RAPID	Orient Gene	One step ethyl glucuronide test dip card (urine)
GBPGB-102b	TEST RAPID	Orient Gene	One step pregabalin test cassette (urine)
GBTRA-101a	TEST RAPID	Orient Gene	One step tramadol test strip (urine)
GBTRA-102a	TEST RAPID	Orient Gene	One step tramadol test cassette (urine)
GBOXY-101a	TEST RAPID	Orient Gene	One step oxycodone Test strip (urine)
GBOXY-102a	TEST RAPID	Orient Gene	One step oxycodone Test cassette (urine)
GBMDP-101a	TEST RAPID	Orient Gene	One step 3,4-Methylenedioxypyrovalerone Test strip (urine)

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GBMDP-101a	TEST RAPID	Orient Gene	One step 3,4-Methylenedioxypyrovalerone Test cassette (urine)
GBMQL-102a	TEST RAPID	Orient Gene	One step Methaqualone Test cassette (urine)
GBMQL-101a	TEST RAPID	Orient Gene	One step Methaqualone Test strip (urine)
GBMPD-101a	TEST RAPID	Orient Gene	One step Methylphenidate Test strip (urine)
GBMPD-102a	TEST RAPID	Orient Gene	One step Methylphenidate Test cassette (urine)
GBUR-101a	TEST RAPID	Orient Gene	One step UR-144 test strip (urine)
GBUR-102a	TEST RAPID	Orient Gene	One step UR-144 test cassette (urine)
GBBUP-101a	TEST RAPID	Orient Gene	One step buprenorphine test strip (urine)
GBBUP-102a	TEST RAPID	Orient Gene	One step buprenorphine test cassette (urine)
GBPCP-101a	TEST RAPID	Orient Gene	One step Phencyclidine Test strip (urine)
GBPCP-102a	TEST RAPID	Orient Gene	One step Phencyclidine Test cassette (urine)
GBTCA-101a	TEST RAPID	Orient Gene	One step Tricyclic Antidepressants test strip (urine)
GBTCA-102a	TEST RAPID	Orient Gene	One step Tricyclic Antidepressants test cassette (urine)
GBEDD-101a	TEST RAPID	Orient Gene	One step EDDP test strip (urine)
GBEDD-102a	TEST RAPID	Orient Gene	One step EDDP test cassette (urine)
GBFEN-101b	TEST RAPID	Orient Gene	One step Fentanyl Test strip (urine)
GBFEN-102b	TEST RAPID	Orient Gene	One step Fentanyl Test cassette (urine)
GBALC-101a	TEST RAPID	Orient Gene	Urine Alcohol Test Strip
GBMAM-S102	TEST RAPID	Orient Gene	One step 6-MAM Test cassette (urine)

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GBMAM-S101	TEST RAPID	Orient Gene	One step 6-MAM Test cassette (urine)
GBHCD-101a	TEST RAPID	Orient Gene	One step Hydrocodone test strip (urine)
GBHCD-102a	TEST RAPID	Orient Gene	One step Hydrocodone test cassette (urine)
GBNFT-101c	TEST RAPID	Orient Gene	One step Norfentanyl test strip (urine)
GBNFT-102c	TEST RAPID	Orient Gene	One step Norfentanyl test cassette (urine)
GBXXX-1102	TEST RAPID	Orient Gene	Hair Multi-Drug Rapid Test Kit (ICA)
GBDSA-XXXXLX	TEST RAPID	Orient Gene	Oral Fluid Drug Test Mini Cube
GBDUA-1X4	TEST RAPID	Orient Gene	One Step Multi-Drug Screen Test Dip Card (urine)
GBDOA-1X5	TEST RAPID	Orient Gene	One Step Multi-Drug Screen Test Cassette (urine)
GBDUA-1X6	TEST RAPID	Orient Gene	One Step Multi-Drug Screen Test Cup (urine)
GBCOT-102a	TEST RAPID	Orient Gene	One step cotinine test cassette (urine)
GBK2-101a	TEST RAPID	Orient Gene	One step K2 Test strip (urine)
GBK2-102a	TEST RAPID	Orient Gene	One step K2 Test cassette (urine)
GBKET-101a	TEST RAPID	Orient Gene	One step Ketamine Test strip (urine)
GBKET-102a	TEST RAPID	Orient Gene	One step Ketamine Test cassette (urine)
GBBZO-101a	TEST RAPID	Orient Gene	One step Benzodiazepines Test Strip (urine)
GBBZO-102a	TEST RAPID	Orient Gene	One step Benzodiazepines Test Cassette (urine)
GBCOC-101a	TEST RAPID	Orient Gene	One step Cocaine Test strip (urine)
GBCOC-102a	TEST RAPID	Orient Gene	One step Cocaine Test cassette (urine)
GBCOC-105a	TEST RAPID	Orient Gene	One step Cocaine Test dip card (urine)
GBMDM-101a	TEST RAPID	Orient Gene	One step ecstasy Test strip (urine)

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GBMDM-102a	TEST RAPID	Orient Gene	One step ecstasy Test cassette (urine)
GBMET-101a	TEST RAPID	Orient Gene	One step Methamphetamine test strip (urine)
GBMET-102a	TEST RAPID	Orient Gene	One step Methamphetamine test cassette (urine)
GBMET-105a	TEST RAPID	Orient Gene	One step Methamphetamine test dip card (urine)
GCTOXI(IgG/IgM)-302a	TEST RAPID	Orient Gene	Toxoplasma gondii test cassette (serum/plasma)
GCTOXI(IgG)-302a	TEST RAPID	Orient Gene	Toxoplasma gondii IgG test cassette (serum/plasma)
GCTOXI(IgM)-302a	TEST RAPID	Orient Gene	Toxoplasma gondii IgM test cassette (serum/plasma)
GCCHL-502a	TEST RAPID	Orient Gene	Chlamydia Trachomatis Antigen test cassette (swab/urine)
GEPSA-402a	TEST RAPID	Orient Gene	Prostate specific antigen test cassette (whole blood/serum/plasma)
GEPSA-401a	TEST RAPID	Orient Gene	Prostate specific antigen test strip (whole blood/serum/plasma)
GEPSA-302a	TEST RAPID	Orient Gene	Prostate specific antigen test cassette (serum/plasma)
GEPSA-301a	TEST RAPID	Orient Gene	Prostate specific antigen test strip (serum/plasma)
GALH-101a-1T	TEST RAPID	Orient Gene	LH Ovulation Test Strip
GALH-101a-5T	TEST RAPID	Orient Gene	LH Ovulation Test Strip
GALH-101a-7T	TEST RAPID	Orient Gene	LH Ovulation Test Strip
GALH-101b-1T	TEST RAPID	Orient Gene	LH Ovulation Test Strip
GALH-101b-5T	TEST RAPID	Orient Gene	LH Ovulation Test Strip
GALH-101b-7T	TEST RAPID	Orient Gene	LH Ovulation Test Strip
GALH-102a-1T	TEST RAPID	Orient Gene	LH Ovulation Test Cassette
GALH-102a-5T	TEST RAPID	Orient Gene	LH Ovulation Test Cassette
GALH-102a-7T	TEST RAPID	Orient Gene	LH Ovulation Test Cassette
GALH-102b-5T	TEST RAPID	Orient Gene	LH Ovulation Test Cassette
GALH-102b-1T	TEST RAPID	Orient Gene	LH Ovulation Test Cassette

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GALH-102b-7T	TEST RAPID	Orient Gene	LH Ovulation Test Cassette

VPH-502a	TEST RAPID	Orient Gene	Vaginal pH test cassette (Vaginal secretions)

URS-1T to 14T with various combination	STRIPURI DE URINA	Orient Gene	LEU/NIT/URO/MA/PRO/PH/BLO/SG/ASC/CRE/KET/BIL/GLU/CA
GCHCV-302a	TEST RAPID	Orient Gene	HCV Hepatitis C Virus Rapid Test (serum/plasma) cassette
GCHCV-402a	TEST RAPID	Orient Gene	HCV Hepatitis C Virus Rapid Test (whole blood/serum/plasma) cassette
GCHIV-302a	TEST RAPID	Orient gene	HIV 1/2 Human Immunodeficiency Virus (Serum/Plasma) cassette
GCHIV-402a	TEST RAPID	Orient gene	HIV 1/2 Human Immunodeficiency Virus (Whole blood/serum/plasma)cassette
GCHBsg-302a	TEST RAPID	Orient gene	HBsAg Hepatitis B Surface Antigen Rapid Test (Serum/Plasma)
GCHBsg-402a	TEST RAPID	Orient gene	HBsAg Hepatitis B Surface Antigen Rapid Test(Whole Blood/Serum/Plasma)

The end.

地址：浙江省湖州市安吉县递铺镇阳光大道东段 3787 号
Add: 3787#, East Yangguang Avenue, Dipu Street Anji 313300, Huzhou, Zhejiang, China
电话 Tel:+86-572-5226111　　传真 Fax: +86-572-5226222　邮编 P.C.:313300

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

DAkkS Deutsche Akkreditierungsstelle D-ZM-11321-01-00

Product Service

Certificate

No. Q5 092305 0001 Rev. 02

Holder of Certificate: **Zhejiang Orient Gene Biotech Co., Ltd.**
3787#, East Yangguang Avenue, Dipu Street Anji
313300 Huzhou, Zhejiang
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:

Scope of Certificate: **Design and Development, Production and Distribution of In Vitro Diagnostic Reagent and Instrument for the Detection of Drugs of Abuse, Fertility, Infectious Diseases, Oncology, Biochemistry, Cardiac Diseases, Allergic Disease based on Rapid Test, PCR and Liquid Biochip Method.**

The Certification Body of TÜV SÜD Product Service GmbH certifies that the company mentioned above has established and is maintaining a quality management system, which meets the requirements of the listed standard(s). All applicable requirements of the testing and certification regulation of TÜV SÜD Group have to be complied with. For details and certificate validity see: www.tuvsud.com/ps-cert?q=cert:Q5 092305 0001 Rev. 02

Report No.: SH2398804

Valid from: 2024-03-17
Valid until: 2027-03-16

Date, 2024-03-01

Christoph Dicks
Head of Certification/Notified Body

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

DAkkS
Deutsche
Akkreditierungsstelle
D-ZM-11321-01-00

TÜV SÜD
Product Service

Certificate

No. Q5 092305 0001 Rev. 02

Applied Standard(s):

ISO 13485:2016
(EN ISO 13485:2016/AC:2018, EN ISO 13485:2016/A11:2021)
Medical devices - Quality management systems -
Requirements for regulatory purposes

Facility(ies):

Zhejiang Orient Gene Biotech Co., Ltd.
3787#, East Yangguang Avenue, Dipu Street Anji, 313300
Huzhou, Zhejiang, PEOPLE'S REPUBLIC OF CHINA

See Scope of Certificate

.

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®

浙江东方基因生物制品股份有限公司
Zhejiang Orient Gene Biotech Co., LTD

CE-DOC-OG073
Version 2.0

EC Declaration of Conformity

In accordance with Directive 98/79/EC

Legal Manufacturer: *Zhejiang Orient Gene Biotech Co., Ltd*

Legal Manufacturer Address: *3787#, East Yangguang Avenue, Dipu Street, Anji 313300, Huzhou, Zhejiang, China*

Declares, that the products
Product Name and Model(s)

Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma)	GDCAR-W435a

Classification: *Other*
Conformity assessment route: *Annex III (EC DECLARATION OF CONFORMITY)*

We, the Manufacturer, herewith declare with sole responsibility that our product/s mentioned above meet/s the provisions of the Directive 98/79/EC of the European Parliament and of the Council on In-Vitro Diagnostic Medical Devices.

We hereby explicitly appoint

EC Representative's Name: Shanghai International Holding Corp. GmbH (Europe)

EC Representative's Address: Eiffestrasse 80, 20537 Hamburg, Germany

to act as our European Authorized Representative as defined in the aforementioned Directive.

I, the undersigned, hereby declare that the medical devices specified above conform with the directive 98/79/EC on in vitro diagnostic medical devices and pertinent essential requirements

Date Signed: March 4, 2022

Joyce Pang

Name of authorized signatory: Joyce Pang
Position held in the company: Vice-President

浙江东方基因生物制品股份有限公司
Zhejiang Orient Gene Biotech Co., LTD

CE-DOC-OG294
Version 1.0

EC Declaration of Conformity

In accordance with Directive 98/79/EC

Legal Manufacturer: *Zhejiang Orient Gene Biotech Co., Ltd*

Legal Manufacturer Address: *3787#, East Yangguang Avenue, Dipu Street, Anji 313300, Huzhou, Zhejiang, China*

Declares, that the products
Product Name and Model(s)

HAV IgG/IgM Rapid Test Cassette (Serum/Plasma)	GCHAV(IgG/IgM)-302a

Classification: *Other*
Conformity assessment route: *Annex III (EC DECLARATION OF CONFORMITY)*

We, the Manufacturer, herewith declare with sole responsibility that our product/s mentioned above meet/s the provisions of the Directive 98/79/EC of the European Parliament and of the Council on In-Vitro Diagnostic Medical Devices.

We hereby explicitly appoint

EC Representative's Name: CMC Medical Devices & Drugs S.L

EC Representative's Address: C/Horacio Lengo Nº 18, CP 29006, Málaga, Spain

to act as our European Authorized Representative as defined in the aforementioned Directive.

I, the undersigned, hereby declare that the medical devices specified above conform with the directive 98/79/EC on in vitro diagnostic medical devices and pertinent essential requirements

Date Signed: March 25, 2022

Name of authorized signatory: Joyce Pang
Position held in the company: Vice-President

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Benannt durch/Designated by
Zentralstelle der Länder
für Gesundheitsschutz
bei Arzneimitteln und
Medizinprodukten
www.zlg.de
ZLG-BS-245.10.07

Product Service

EC Certificate

EC Design-Examination Certificate
Directive 98/79/EC on In Vitro Diagnostic Medical Devices (IVDD), Annex IV (4) (List A)

No. V7 092378 0009 Rev. 00

Manufacturer:

Healgen Scientific Limited Liability Company
3818 Fuqua Street
Houston TX 77047
USA

Product: **Screening test for Hepatitis C marker**

The Certification Body of TÜV SÜD Product Service GmbH declares that a design examination has been carried out on the respective devices in accordance with IVDD Annex IV (4). The design of the devices conforms to the requirements of this Directive. All applicable requirements of the testing and certification regulation of TÜV SÜD Group have to be complied with. For details and certificate validity see: www.tuvsud.com/ps-cert?q=cert:V7 092378 0009 Rev. 00

Report No.: 713234651

Valid from: 2022-04-22
Valid until: 2025-05-26

Date, 2022-04-22

Christoph Dicks
Head of Certification/Notified Body

TÜV SÜD Product Service GmbH is Notified Body with identification no. 0123

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

Benannt durch/Designated by
Zentralstelle der Länder
für Gesundheitsschutz
bei Arzneimitteln und
Medizinprodukten
www.zlg.de
ZLG-BS-245.10.07

TÜV SÜD Product Service

EC Certificate

EC Design-Examination Certificate
Directive 98/79/EC on In Vitro Diagnostic Medical Devices (IVDD), Annex IV (4) (List A)

No. V7 092378 0009 Rev. 00

Model(s): **HCV Hepatitis C Virus Rapid Test**

Facility(ies):

Zhejiang Orient Gene Biotech Co., Ltd.
3787#, East Yangguang Avenue, Dipu Street Anji,
313300 Huzhou, Zhejiang, PEOPLE'S REPUBLIC OF CHINA

Parameters:

Model Name:	Model No.:
--	
HCV Hepatitis C Virus Rapid Test (Serum / Plasma) (Cassette)	GCHCV-302a
HCV Hepatitis C Virus Rapid Test (Whole Blood /Serum / Plasma) (Cassette)	GCHCV-402a

TÜV SÜD Product Service GmbH is Notified Body with identification no. 0123

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®

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Fax: +1 713 733 8848
Web: www.Healgen.com
E-mail: sales@healgen.com

CE-DOC-H003
Ver.1.7

EC Declaration of Conformity

In accordance with Directive 98/79/EC

Legal Manufacturer: Healgen Scientific Limited Liability Company

Legal Manufacturer Address: *3818 Fuqua Street, Houston, TX 77047, USA.*

Declares, that the products
Product Name and Model(s)

Orient Gene HCV Hepatitis C Virus Rapid Test (Serum/Plasma) (Cassette)	GCHCV-302a
Orient Gene HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette)	GCHCV-402a

EDMA Code: 15 70 02 02

Classification: *Annex II List A*
Conformity assessment route: *Annex IV (Full Quality Assurance)*

Compliance of the designated product with the Directive 98/79/EC has been assessed and certified by the Notified Body
Notified Body: TÜV SÜD Product Service GmbH
Notified Body Address: Munich Branch Ridlerstraße 65 80339 München Germany
EC Certificate No.: V1 092378 0004 Rev. 02 Valid until: 2025-05-26
EC Design-Examination Certificate No.: V7 092378 0009 Rev. 00 Valid until: 2025-05-26

It bears the mark

CE 0123

We, the Manufacturer, herewith declare with sole responsibility that our product/s mentioned above meet/s the provisions of the Directive 98/79/EC of the European Parliament and of the Council on In-Vitro Diagnostic Medical Devices.
We hereby explicitly appoint
EC Representative Name: QARAD b.v.b.a.
EC Representative Address: Cipalstraat 3, B-2440 Geel, Belgium

to act as our European Authorized Representative as defined in the aforementioned Directive.

I, the undersigned, hereby declare that the medical devices specified above conform with the directive 98/79/EC on in vitro diagnostic medical devices and pertinent essential requirements

Signature:
Name of authorized signatory: Joyce Pang
Position held in the company: Vice-President
Date: 2022.4.22

Zhejiang Orient Gene Biotech Co., LTD

CERTIFICATE OF ANALYSIS

Product Name：HBsAg Rapid Test (Whole blood/Serum/Plasma) (Cassette)

Catalog NO.: GCHBsg-402a

Purchase NO.: 2025-IEU010#

Lot NO.: 2501182

Quantity: 3000pcs

Expiration Date: 2026.12

CONTROLS		SPECIFICATION	TEST RESULT	CONCLUSION
Negative Specimens		Negative	Negative	☑Pass □Fail
Positive Specimens	1ng/ml	Positive	Positive	☑Pass □Fail
	2ng/ml	Positive	Positive	☑Pass □Fail
	3ng/ml	Positive	Positive	☑Pass □Fail
	5ng/ml	Positive	Positive	☑Pass □Fail

Conclusion: ☑Pass:All results meet QC standard.
□Fail

ZHEJIANG ORIENT GENE BIOTECH CO.,LTD 浙江东方基因生物制品股份有限公司 检验专用章

Test by: 查妍 Date: 2025.01.22

QC Supervisor: 黄仪愚 Date: 2025.01.22

HAV IgG/IgM Rapid Test Cassette (Serum/Plasma)

INTENDED USE

HAV IgG/IgM Rapid Test Cassette (Serum/Plasma) is a single use, rapid device intended for qualitative and differential detection of IgG-class antibodies and IgM-class antibodies to hepatitis A virus (HAV) in human serum or plasma samples. It is intended to be used as a screening test and as an aid in the diagnosis of infection with HAV. Any reactive specimen with the HAV IgG/IgM Rapid Test Cassette (Serum/Plasma) must be confirmed with alternative testing method(s) and clinical findings.

INTRODUCTION

Hepatitis A is a self-limited disease and chronic stage, or other complications are rare. Infections occur early in life in areas where sanitation is poor and living conditions are crowded. With improved sanitation and hygiene, infections are delayed and consequently the number of persons susceptible to the disease increases. Because the disease is transmitted through the fecal-oral route in densely populated regions, an outbreak can arise from single contaminated source. The cause of hepatitis A is hepatitis A virus (HAV)-non enveloped positive strand RNA virus with a linear single strand genome, encoding for only one known serotype. HAV has four major, structural polypeptides and it localizes exclusively in the cytoplasm of human hepatocytes. The infection with HAV induces strong immunological response and elevated levels first of IgM and then IgG are detectable within a few days after the onset of the symptoms. The presence of anti–HAV IgM is an important serological marker for early detection and observation of the clinical manifestation of the disease. Increasing levels of anti-HAV IgM are detectable about three weeks after exposure with highest titter after four to six weeks later. Within six months after infection IgM concentration declines to non-detectable levels. At the onset of disease, the presence of IgG anti-HAV is always accompanied by the presence of IgM anti-HAV. At the onset of disease, the presence of IgG anti-HAV is always accompanied by the presence of IgM anti-HAV. Even after more than 10 years the IgG anti-HAV titers usually remain at more than 1 to 10 IU/mL.

PRINCIPLE

HAV IgG/IgM Rapid Test Cassette (Serum/Plasma) is based on the principle of agglutinating sera on membrane and utilizes the technique of immunochromatography. The sample pad is coated with HAV antigen. As the test specimen flows through the sample pad assembly of the device, the HAV antigen complex with the HAV specific antibodies in the test specimen. When this complex travels on the conjugated pad which is impregnated with mouse anti-HAV antibody conjugated to the colloidal gold, the HAV colloidal gold react with the complex then travels on the membrane due to capillary action. If HAV IgM antibodies present in the specimen, the complex will be captured on the membrane by the pre-coated anti-human IgM antibody, forming a burgundy-colored IgM band, indicating a IgM positive test result. Alternatively, if HAV IgG antibodies present in the specimen, the complex will be captured on the membrane by the pre-coated anti-human IgG antibody, forming a burgundy-colored IgG band, indicating a IgG positive test result. Absence of any T bands indicates a negative result. The test contains an internal control (C band) which is coated with goat anti-mouse IgG should exhibit a burgundy-colored band regardless of the color development on any of the T bands. Otherwise, the test result is invalid, and the specimen must be retested with another device.

MATERIALS SUPPLIED

Test cassette Dropper Extraction tube Buffer Workstation Package insert

MATERIAL REQUIRED BUT NOT PROVIDED

1. Clock or timer
2. Centrifuge
3. Pipette gun and tip
4. Pen or pencil
5. Collection tube (containing anticoagulants of EDTA, Oxalate or Heparin)

STORAGE AND STABILITY

All reagents are ready to use as supplied. Store unused test device unopened at 2°C-30°C. If stored at 2°C-8°C, ensure.
that the test device is brought to room temperature before opening. The test device is stable through the expiration date.
printed on the sealed pouch. Do not freeze the kit or expose the kit over 30°C.

WARNINGS AND PRECAUTIONS

1. For professional in vitro diagnostic use only.
2. For best results, strict adherence to these instructions is required.
3. All specimens should be handled as being potentially infectious.
4. Wear protective clothing and disposable gloves while handling the kit reagents and clinical specimens. Wash hands thoroughly after performing the test.
5. The test device is sensitive to humidity as well as to heat.
6. Decontaminate and dispose of all specimens, reaction kits and potentially contaminated materials, as if they were infectious waste, in a biohazard container.
7. Do not use it beyond the expiration date. The shelf-life of the kit is as indicated on the outer package.
8. Do not use the test kit if the pouch is damaged or the seal is broken.
9. The components (test device and assay diluent) in this kit have been quality control tested as standard batch unit. Do not mix components from different lot numbers.
10. The assay diluent contains low concentration of sodium azide as a preservative. Sodium azide is toxic and should be handled carefully to avoid ingestion and skin contact.
11. Do not perform the test in a room with strong air flow, i.e., an electric fan or strong air-conditioning.

SPECIMEN COLLECTION, STORAGE AND PREPARATION

- Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. specimens should not be frozen and thawed repeatedly.
- If specimens are to be shipped, they should be packed in compliance with usual regulations for transportation of etiological agents.
- Plasma specimens containing anticoagulants other than EDTA, Oxalate or Heparin may give incorrect results.
- Do not use haemolysed, clotted, contaminated, viscous/turbid specimen.
- Do not heat inactivate the sample before use.

Serum or Plasma

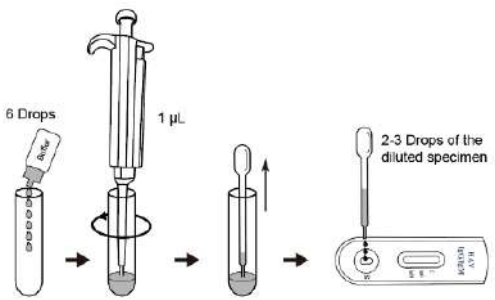
- Serum/plasma may be stored at 2- 8°C up to 3 days in case of delay in testing. For long-term storage, freeze the specimen at -20°C.
- Specimen containing precipitates or particulate matter must be centrifuged, and only use the clear supernatant for testing.
- Repeated freezing and thawing of the serum/plasma specimen should be avoided. Maximum of 2 freeze/thaw cycles are allowed.

Plasma: Collect the whole blood into the collection tube (containing anticoagulants of EDTA, Oxalate or Heparin) by venipuncture and then centrifuge the blood to get plasma specimen.
Serum: Collect the whole blood into the collection tube (NOT containing anticoagulants) by venipuncture, leave to settle for 30 minutes to allow for blood coagulation and then centrifuge the blood to get serum specimen.
The centrifuge setting 1,000-1,500 g for approximately 5 minutes is required and refrigeration is not required.

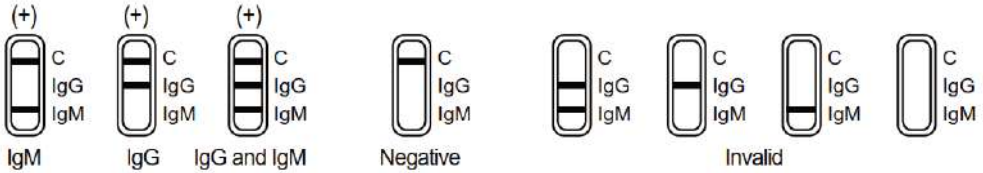
TEST PROCEDURE

Allow test cassette, specimen, buffer and/or controls to equilibrate to room temperature (15-30°C) prior to testing.

1. Remove the test cassette from the foil pouch and use it as soon as possible (within one hour). Place the test device on a clean and flat surface. Write specimen ID on the test cassette.
2. Locate the extraction tube on the workstation. Unscrew the buffer cap, add 6 drops (about 250 µL) of buffer solution into the extraction tube.
3. Using a pipette to transfer 1 µL of specimen from the collection tube into the extraction tube, then use the pipette to mix the solution completely.
4. Hold the dropper vertically and transfer 2-3 drops (about 70-100 µL) of mixed solution into sample well (S) of the test cassette. Start the timer.
5. As the test begins to work, a red color moves across the reading window of test device.
6. Wait for the red line/lines to appear. Read test results in 15 minutes. NOTE: Do not read results after 15 minutes.



INTERPRETATION OF RESULTS



1. Positive:
1.1 IgM Positive: In addition to the presence of C band, if only IgM band is developed, the test indicates the possibility of primary infection.
1.2 IgG Positive: In addition to the presence of C band, if only IgG band is developed, the test indicates the possibility of the secondary infection or past infection. Vaccination may be one of the reasons for being positive for HAV IgG.
1.3 Both IgG and IgM Positive: In addition to the presence of C band, both IgM and IgG bands are developed, the test indicates the possibility of acute secondary infection. Vaccination may be one of the reasons for being positive for HAV IgG.
2. Negative: If only the C band is present, the absence of any burgundy color in both test bands (IgM and IgG) indicates that no HAV antibody is detected in the specimen. The result is negative or non-reactive.
3. Invalid: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test cassette. If the problem persists, discontinue using the test kit immediately and contact your local distributor.

QUALITY CONTROL

An internal procedural control is included in the test. A colored line appearing in the control line region (C) is an internal positive procedural control. It confirms sufficient specimen volume, adequate membrane wicking and correct procedural technique.
Control standards are not supplied with this kit; however, it is recommended that positive and negative controls be tested as a good laboratory practice to confirm the test procedure and to verify proper test performance.

LIMITATIONS

1. The test procedure, precautions and interpretation of results for this test must be followed strictly when testing. Failure
   to follow the procedure may give inaccurate results.
2. The HAV IgG/IgM Rapid Test Cassette (Serum/Plasma) is for in vitro diagnostic use only. The test should be used for the detection of HAV antibodies in human serum or plasma specimens only.
3. This test detects the presence of antibodies to Hepatitis A virus in the specimen and should not be used as the sole criterion for the diagnosis of Hepatitis A virus infection.
4. If the test result is negative and clinical symptoms persist, additional testing using other clinical methods is recommended. A negative result does not at any time preclude the possibility of HAV infection.
5. A negative result can occur if the quantity of the IgG and/or IgM anti-HAV present in the specimen is below the detection limits of the assay, or the antibodies that are detected are not present during the stage of disease in which a
   sample is collected.
6. As with many very sensitive rapid diagnostic tests, false positive results can occur due to the several reasons, most of which are related but not limited to the quality of the sample and exposition of the test to humidity.
7. Vaccination may be one of the reasons for being positive for HAV IgG.
8. As with all diagnostic tests, a definitive clinical diagnosis should not be based on the result of a single test but should only be made by the physician after all clinical and laboratory findings have been evaluated.

PERFORMANCE CHARACTERISTICS

1. Clinical Performance for IgM Test

A total of 425 samples from susceptible subjects were tested by the HAV IgG/IgM Rapid Test Cassette (Serum/Plasma) and by a commercial HAV IgM EIA test. Comparison for all subjects is showed in the following table:

The HAV IgG/IgM Rapid Test Cassette vs. HAV IgM EIA test

Method		HAV IgM EIA		Total Results
HAV IgG/IgM Rapid Test Cassette	Results	Positive	Negative	
	Positive	203	5	208
	Negative	3	214	217
Total Results		206	219	425

Relative sensitivity: 98.5%
Relative specificity: 97.7%
Accuracy: 98.1%

2. Clinical Performance for IgG Test

A total of 425 samples from susceptible subjects were tested by the HAV IgG/IgM Rapid Test Cassette (Serum/Plasma) and by a commercial HAV IgG EIA test. Comparison for all subjects is showed in the following table:

The HAV IgG/IgM Rapid Test Cassette vs. HAV IgG EIA test

Method		HAV IgG EIA		Total Results
HAV IgG/IgM Rapid Test Cassette	Results	Positive	Negative	
	Positive	203	5	208
	Negative	3	214	217
Total Results		206	219	425

Relative sensitivity: 98.5%
Relative specificity: 97.7%
Accuracy: 98.1%

REFERRENCE

1. J.V. PARRY, (1981). Hepatitis A infection: guidelines for development of satisfactory assays for laboratory diagnosis. The Institute of Medical Laboratory Sciences 38, 303-311.
2. Lindberg J., Frosner G., Hansson B.G. et al. Serologic markers of hepatitis A and B in chronic active hepatitis. Scandinavian Journal of Gastroenterology, 13:525-527, 1978.
3. Battegay M, Gust ID, and Feinstone SM. Hepatitis A virus. In: Mandell GL, Bennett JE, and Dolin R, eds. Principles and Practice of Infectious Diseases, 4th ed. New York, Churchill Livingstone, 1995:1636-1656.
4. Berge JJ et al. The cost of hepatitis A infections in American adolescents and adults in 1997.Hepatology, 2000, 31(2): 469-473.
5. Burke DS, Graham RR, and Heisey GB. Hepatitis A virus in primates outside captivity. Lancet, 1981, 2:928.45(RR15):1-30.

Cat.No.:GCHAV(IgG/IgM)-302a

Effective Date: 2024-09-10

B21554-03

Hepatitis B Surface Antigen Rapid Test Cassette (Whole blood/Serum/Plasma)

INTENDED USE

The Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) is a lateral flow chromatographic immunoassay for the qualitative detection of Hepatitis B surface antigen (HBsAg) in human whole blood, serum or plasma. It is intended to be used as a. screening test and as an aid in the diagnosis of infection with Hepatitis B virus (HBV). Any reactive specimen with the HBsAg Rapid Test Cassette must be confirmed with alternative testing method(s) and clinical findings.

INTRODUCTION

Viral hepatitis is a systemic disease primarily involving the liver. Most cases of acute viral hepatitis are caused by Hepatitis A virus, Hepatitis B virus (HBV) or Hepatitis C virus. The complex antigen found on the surface of HBV is called HBsAg. The presence of HBsAg in serum or plasma is an indication of an active Hepatitis B infection, either acute or chronic. In a typical Hepatitis B infection, HBsAg will be detected 2 to 4 weeks before the ALT level becomes abnormal and 3 to 5 weeks before symptoms or jaundice develop. HBsAg has four principal subtypes: adw, ayw, adr and ayr. Because of antigenic heterogeneity of the determinant, there are 10 major serotypes of Hepatitis B virus. The HBsAg Test Cassette (Whole Blood/Serum/Plasma) is a rapid test to qualitatively detect the presence of HBsAg in whole blood, serum or plasma specimens. The test utilizes a combination of double monoclonal antibodies to selectively detect elevated levels of HBsAg in whole blood, serum or plasma.

PRINCIPLE

The Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) is a lateral flow chromatographic immunoassay based on the principle of the double antibody-sandwich technique. The membrane is pre-coated with anti-HBsAg antibodies on the test line region of the test. During testing, Hepatitis B Surface Antigen in the whole blood, serum or plasma specimen reacts with the particle coated with anti-HBsAg antibody. The mixture migrates upward on the membrane, chromatographically by capillary action to react with anti-HBsAg antibodies on the membrane and generate a colored line. The presence of this colored line in the test region indicates a positive result, while its absence indicates a negative result. To serve as a procedural control, a colored line will always appear in the control line region indicating that the proper volume of specimen has been added and membrane wicking has occurred.

PRODUCT CONTENTS

The Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) containing anti-HBsAg antibodies particles and anti-HBsAg antibodies coated on the membrane.

MATERIALS SUPPLIED

Test cassette Dropper Buffer Package insert

MATERIAL REQUIRED BUT NOT PROVIDED

1. Specimen collection containers
2. Lancets (for fingerstick whole blood only)
3. Centrifuge (for plasma only)
4. Timer
5. Heparinized capillary tubes and dispensing bulb (for fingerstick whole blood only)

STORAGE AND STABILITY

The kit can be stored at room temperature or refrigerated (2-30°C). The test device is stable through the expiration date printed on the sealed pouch. The test cassette must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date.

WARNINGS AND PRECAUTIONS

1. For professional In Vitro diagnostic use only. Do not use after expiration date.
2. Warning: the reagents in this kit contain sodium azide which may react with lead or copper plumbing to form potentially explosive metal azides. When disposing of such reagents, always flush with large volumes of water to prevent azide build-up.
3. Do not use it if the tube/pouch is damaged or broken.
4. Test is for single use only. Do not re-use under any circumstances.
5. Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards throughout testing and follow the standard procedures for proper disposal of specimens.
6. Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assayed.
7. Humidity and temperature can adversely affect results.
8. Do not perform the test in a room with strong air flow, i.e. electric fan or strong air-conditioning.

SPECIMEN COLLECTION AND PREPARATION

1. Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) can be performed using whole blood (from venipuncture or fingerstick), serum or plasma.
2. To collect Fingerstick Whole Blood specimens:

- Wash the patient's hand with soap and warm water or clean with an alcohol swab. Allow to dry.
- Massage the hand without touching the puncture site by rubbing down the hand towards the fingertip of the middle or ring finger.
- Puncture the skin with a new sterile lancet for each person. Wipe away the first sign of blood.
- Gently rub the hand from wrist to palm to finger to form a rounded drop of blood over the puncture site.
- Add the Fingerstick Whole Blood specimen to the test cassette by using a capillary tube:
  - Touch the end of the capillary tube to the blood until filled to approximately 50µL. Avoid air bubbles.
  - Place the bulb onto the top end of the capillary tube, then squeeze the bulb to dispense the whole blood into the specimen well (S) of the test cassette.
- Add the Fingerstick Whole Blood specimen to the test cassette by using hanging drops:
  - Position the patient's finger so that the drop of blood is just above the specimen well (S) of the test cassette.
  - Allow 2 hanging drops of fingerstick whole blood to fall into the center of specimen well (S) on the test cassette, or move the patient's finger so that the hanging drop touches the center of the specimen well (S). Avoid touching the finger directly to the specimen well (S).

3. Separate serum or plasma from blood as soon as possible to avoid hemolysis. Use only clear, non-hemolyzed specimens.
4. Testing should be performed immediately after specimen collection. Do not leave the specimens at room temperature for prolonged periods. Serum and plasma specimens may be stored at 2-8°C for up to 3 days. For long term storage, specimens should be kept below -20°C. Whole blood collected by venipuncture should be stored at 2-8°C if the test is to be run within 2 days of collection. Do not freeze whole blood specimens. Whole blood collected by fingerstick should be tested immediately.
5. Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. Specimens should not be frozen and thawed repeatedly.
6. If specimens are to be shipped, they should be packed in compliance with local regulations covering the transportation of etiologic agents.

TEST PROCEDURE

Allow test cassette, specimen, buffer and/or controls to equilibrate to room temperature (15-30°C) prior to testing.

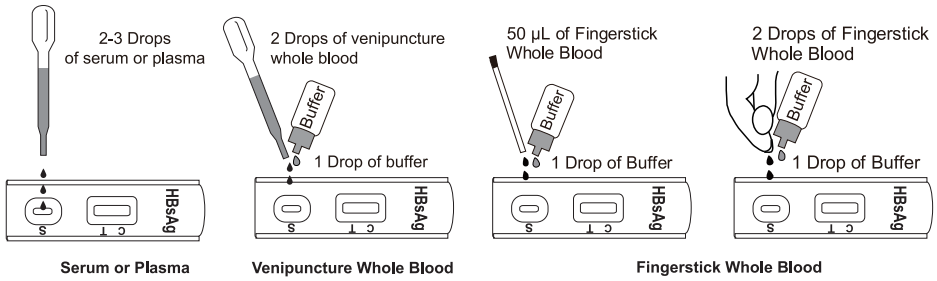
1. Remove the test cassette from the foil pouch and use it as soon as possible. Best results will be obtained if the assay is performed within one hour.
2. Place the test cassette on a clean and level surface.

For Serum or Plasma Specimens: Hold the dropper vertically and transfer 2-3 drops of serum or plasma (approximately 60-90µL) to the specimen well (S) of the test cassette. See illustration below.

For Venipuncture Whole Blood Specimens: Hold the dropper vertically and transfer 2 drops of venipuncture whole blood (approximately 50µL) to the specimen well (S) of the test cassette, then add 1 drop of buffer (approximately 40 µL) and start the timer. See illustration below.

For Fingerstick Whole Blood Specimens: Allow 2 hanging drops of fingerstick whole blood (approximately 50 µL) to fall into the center of the specimen well (S) on the test cassette, then add 1 drop of buffer (approximately 40 µL) and start the timer. See illustration below.

3. Wait for the red line(s) to appear. The result should be read in 15 minutes. Do not interpret the result after 15 minutes



INTERPRETATION OF RESULTS

POSITIVE: Two distinct red lines appear. One line should be in the control region (C) and another line should be in the test region (T).
NEGATIVE: One red line appears in the control region (C). No apparent red or pink line appears in the test region (T).
INVALID: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test Cassette. If the problem persists discontinue using the test kit immediately and contact your local distributor

QUALITY CONTROL

A procedural control is included in the test. A red line appearing in the control region (C) is the internal procedural control. It confirms sufficient specimen volume and correct procedural technique. Control standards are not supplied with this kit; however, it is recommended that positive and negative controls be tested as a good laboratory practice to confirm the test procedure and to verify proper test performance.

LIMITATIONS

1. Though the Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) is a reliable screening assay, it should not be used as a sole criterion for diagnosis of HBV infection.
2. The HBsAg Rapid Test Cassette is limited to the qualitative detection of HBsAg in human whole blood, serum or plasma. The intensity of the test band does not have linear correlation with HBsAg titer in the specimen.
3. A negative test result does not preclude the possibility of exposure to or infection with HBV. Infection through recent exposure (seroconversion) to HBV may not be detectable.
4. A negative result can occur if the quantity of HBsAg present in the specimen is below the detection limits of the assay (lower than1 ng/mL), or the HBsAg that are detected are not present during the stage of disease in which a sample is collected.
5. Interference due to heterophile antibodies, Rheumatoid Factors and other nonanalyte substances in patient's serum, capable of binding antibodies multivalently and providing erroneous analyte detection in immunoassays, has been reported in various studies. Both laboratory professionals and clinicians must be vigilant to this possibility of antibody interference. Results that appear to be internally inconsistent or incompatible with the clinical presentation should invoke suspicion of the presence of an endogenous artifact and lead to appropriate in vitro investigative action.
6. This kit is intended ONLY for testing of individual samples. Do not use it for testing of cadaver samples, saliva, urine or other body fluids, or pooled (mixed) blood.
7. As with all diagnostic tests, a definitive clinical diagnosis should not be based on the result of a single test, but should only be made by the physician after all clinical and laboratory findings have been evaluated.

PERFORMANCE CHARACTERISTICS

Sensitivity:

The Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) has been tested with a sensitivity panel ranging from 0 to 300 ng/mL. All 10 HBsAg subtypes produced positive results on the Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma). The test can detect 5ng/mL of HBsAg in 10 minutes, and 1 ng/mL of HBsAg in 15 minutes.

Specificity:

Antibodies used for the Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) were developed against whole Hepatitis B antigen isolated from Hepatitis B virus. Specificity of the Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) was also tested with laboratory strains of Hepatitis A and Hepatitis C. They all yielded negative results.

Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma) **vs. EIA test**

Method		EIA		Total Results
Hepatitis B Surface Antigen Rapid Test Cassette (Whole Blood/Serum/Plasma)	Results	Positive	Negative	
	Positive	345	5	350
	Negative	2	980	982
Total Results		347	985	1332

Relative sensitivity: 99.4%
Relative specificity 99.5%
Accuracy: 99.5%

REFERENCE

1. Blumberg, B. S. The Discovery of Australian Antigen and its relation to viral hepatitis. Vitro. 1971; 7: 223

Effective Date: 2023-08-22
B20137-05

HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette)

CE 0123

REF GCHCV-402a

INTENDED USE

The HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) is a sandwich lateral flow chromatographic immunoassay for the qualitative detection of antibodies (IgG, IgM, and IgA) to Hepatitis C virus (HCV) in human whole blood, serum or plasma. It is intended to be used as a screening test and as an aid in the diagnosis of infection with HCV. Any reactive specimen with the HCV Hepatitis C Virus Rapid Test Cassette must be confirmed with alternative testing method(s) and clinical findings.

INTRODUCTION

Hepatitis C Virus (HCV) is a small, enveloped, positive-sense, single-stranded RNA virus. Antibody to HCV is found in over 80% of patients with well-documented non-A, non-B hepatitis. Conventional methods fail to isolate the virus in cell culture or visualize it by electron microscope. Cloning the viral genome has made it possible to develop serologic assays that use recombinant antigens (1, 2). Compared to the first generation HCV EIAs using single recombinant antigen, multiple antigens using recombinant protein and/or synthetic peptides have been added in new serologic tests to avoid nonspecific cross-reactivity and to increase the sensitivity of the HCV antibody tests (3, 4). HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) is a rapid test to qualitatively detect the presence of antibody to HCV in a whole blood, serum or plasma specimen. The test utilizes a combination of recombinant antigen to selectively detect elevated levels of HCV antibodies in whole blood, serum or plasma.

PRINCIPLE

The HCV Hepatitis C Virus Rapid Test Cassette is a lateral flow chromatographic immunoassay based on the principle of the double antigen–sandwich technique. The test Cassette consists of: 1) a burgundy colored conjugate pad containing HCV antigens conjugated with colloidal gold (HCV Ag conjugates) and rabbit IgG-gold conjugates, 2) a nitrocellulose membrane Cassette containing a test band (T band) and a control band (C band). The T band is pre-coated with non-conjugated HCV antigens, and the C band is pre-coated with goat anti-rabbit IgG. When an adequate volume of test specimen is dispensed into the sample well of the Cassette, the specimen migrates by capillary action across the Cassette. The antibodies: either the IgG, the IgM, or the IgA, to HCV if present in the specimen will bind to the HCV Ag conjugates. The immunocomplex is then captured on the membrane by the precoated HCV antigens, forming a burgundy colored T band, indicating a HCV Ab positive test result. Absence of the T band suggests a negative result. The test contains an internal control (C band) which should exhibit a burgundy colored band of the immunocomplex of goat anti-rabbit IgG and rabbit IgG-gold conjugate regardless the presence of any antibodies to HCV. Otherwise, the test result is invalid and the specimen must be retested with another Cassette.

PRODUCT CONTENTS

HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) containing HCV antigen (HCV antigen includes core, NS3, NS4 and NS5 segment) coated particles and HCV antigen (HCV recombinant antigen includes core, NS3, NS4 and NS5 segment) coated on the membrane.

MATERIALS SUPPLIED

1. 25 sealed pouches each containing a test cassette, a pipette dropper and a desiccant
(Test Cassette T band is pre-coated with non-conjugated HCV antigens, and the C band is pre-coated with goat anti-rabbit IgG on the nitrocellulose and coupled to colloidal gold on label pad)
2. 1 Package insert

3. 1 Buffer (4 mL) (Casein-salt: 1%, NaCl: 0.9%, Na_2HPO_4: 0.286%, NaN_3: 0.5%)	Warning	Warning: 0.5% NaN_3 Harmful if swallowed; Harmful to aquatic life with long lasting effects Prevention Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product Avoid release to the environment. Response IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get medical attention/advice if you feel unwell

MATERIAL REQUIRED BUT NOT PROVIDED

1. Specimen collection containers
2. Sterile lancets (for fingerstick whole blood only)
3. Centrifuge (for plasma only)
4. Timer
5. Heparinized capillary tubes and dispensing bulb (for fingerstick whole blood only)

STORAGE AND STABILITY

The kit can be stored at room temperature or refrigerated (2-30°C). The test Cassette is stable through the expiration date printed on the sealed pouch. The test Cassette must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date.

WARNINGS AND PRECAUTIONS

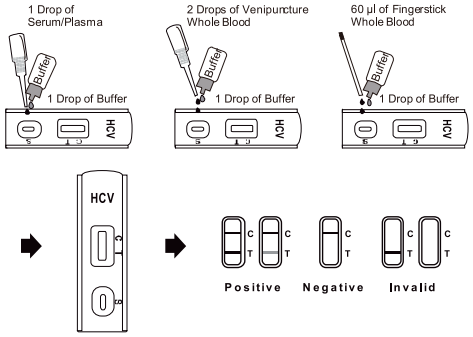
1. For professional *in vitro* diagnostic use only. Do not use after expiration date.
2. Warning: the reagents in this kit contain sodium azide which may react with lead or copper plumbing to form potentially explosive metal azides. When disposing of such reagents, always flush with large volumes of water to prevent azide build-up.
3. Do not use it if the tube/pouch is damaged or broken.
4. Test is for single use only. Do not re-use under any circumstances.
5. Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards throughout testing and follow the standard procedures for proper disposal of specimens.
6. Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assayed.
7. Humidity and temperature can adversely affect results.
8. Do not perform the test in a room with strong air flow, ie. an electric fan or strong airconditioning.

SPECIMEN COLLECTION

1. The HCV Hepatitis C Virus Rapid Test (Whole Blood/Serum/Plasma) (Cassette) can be performed using whole blood (from venipuncture and fingerstick), serum or plasma.
2. For venipuncture whole blood and plasma: K_2EDTA, Sodium Heparin, Sodium citrate Sterile, and Lithium heparin should be used as the anticoagulant. Other anticoagulants have not been tested and may give incorrect results.
3. To collect Fingerstick Whole Blood specimens:
 • Wash the patient's hand with soap and warm water or clean with an alcohol wipe . Allow to dry.
 • Massage the hand without touching the puncture site by rubbing down the hand towards the fingertip of the middle or ring finger.
 • Puncture the skin with a new sterile lancet for each person. Wipe away the first sign of blood.
 • Gently rub the hand from wrist to palm to finger to form a rounded drop of blood over the puncture site.
 • Add the Fingerstick Whole Blood specimen to the test device by using a capillary tube:
 • Touch the end of the capillary tube to the blood until filled to approximately 60 µL. Avoid air bubbles.
 • Place the bulb onto the top end of the capillary tube, then squeeze the bulb to dispense the whole blood into the specimen well (S) of the test device.
 • Separate serum or plasma from blood as soon as possible to avoid hemolysis. Use only clear, nonhemolyzed specimens.
4. Testing should be performed immediately after specimen collection. Do not leave the specimens at room temperature for prolonged periods. Serum and plasma specimens may be stored at 2-8°C for up to 3 days and may be stored at -20°C for 6 months. Whole blood collected by venipuncture should be stored at 2-8°C if the test is to be run within 2 days of collection. Do not freeze whole blood specimens. Whole blood collected by fingerstick should be tested immediately.
5. Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. Specimens should not be frozen and thawed repeatedly.
6. If specimens are to be shipped, they should be packed in compliance with usual regulations for transportation of etiological agents.

TEST PROCEDURE

Allow test cassette, specimen, buffer and/or controls to equilibrate to room temperature (15-30°C) prior to testing.
1. Remove the test Cassette from the foil pouch and use it as soon as possible. Best results will be obtained if the assay is performed within one hour.
2. Place the test Cassette on a clean and level surface.
For Serum or Plasma Specimens: Hold the dropper vertically and transfer 1 drop of serum or plasma (approximately 30 µL) to the specimen well (S) of the test Cassette, then add 1 drop of buffer (approximately 40 µL) and start the timer. See illustration below.
For Venipuncture Whole Blood Specimens: Hold the dropper vertically and transfer 2 drops of venipuncture whole blood (approximately 60 µL) to the specimen well (S) of the test Cassette, then add 1 drop of buffer (approximately 40 µL) and start the timer. See illustration below.
For Fingerstick Whole Blood specimens: To use a capillary tube: Fill the capillary tube and transfer approximately 60 µL of fingerstick whole blood specimen to the specimen well (S) of the test device, then add 1 drops of buffer (approximately 40 µL) and start the timer. See illustration below.
3. Wait for the red line(s) to appear. The result should be read at 15 minutes. Do not interpret the result after 30 minutes.



INTERPRETATION OF RESULTS

(Please refer to the illustration above)
Positive: Two lines appear. One colored line should be in the control line region (C) and another apparent colored line should be in the test line region (T).
Negative: One colored line appears in the control line region (C). No line appears in the test line region (T).
Invalid: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test Cassette. If the problem persists, discontinue using the test kit immediately and contact your local distributor.

QUALITY CONTROL

A procedural control is included in the test. A red line appearing in the control region (C) is the internal procedural control. It confirms sufficient specimen volume and correct procedural technique. Control standards are not supplied with this test. However, it is recommended that positive and negative controls are sourced from a local competent authority and tested as a good laboratory practice, to confirm the test procedure and verify the test performance.

LIMITATIONS

1. The HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) is for *in vitro* diagnostic use only. This test should be used for the detection of antibodies to HCV in whole blood, serum or plasma specimen.
2. The HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) will only indicate the presence of antibodies to HCV in the specimen and should not be used as the sole criteria for the diagnosis of Hepatitis C viral infection.
3. As with all diagnostic tests, all results must be considered with other clinical information available to the physician.
4. If the test result is negative and clinical symptoms persist, additional follow-up testing using other clinical methods is recommended. A negative result at any time does not preclude the possibility of Hepatitis C Virus infection.
5. A negative result can occur if the quantity of the antibodies to HCV present in the specimen is below the detection limits of the assay, or the antibodies that are detected are not present during the stage of disease in which a sample is collected.
6. Some specimens containing unusually high titer of heterophile antibodies or rheumatoid factor may affect expected results.
7. As with all diagnostic tests, a definitive clinical diagnosis should not be based on the results of a single test, but should only be made by the physician after all clinical and laboratory findings have been evaluated.
8. Results should not be used to determine the genotype of HCV infections.
9. Due to possible cross reactivity, the appearance of lines in T line does not necessarily indicate co-infection from IgG, IgM or IgA, nor can it identify the serotype.
10. The recommended anticoagulants are K_2EDTA, Sodium Heparin, Sodium citrate Sterile and Lithium heparin for venous whole blood. Other anticoagulants have not been evaluated with this test.

PERFORMANCE CHARACTERISTICS

Relative Sensitivity

A total of 506 HCV positive specimens were tested using the HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) and a commercially available test (Table 1). The relative sensitivity of the test is >99.9% (95% confidence interval: 99.27% – 100%).
Table 1: Sensitivity of HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette)

Population	Specimen Type	Number of Specimens Tested	Positive by HCV Hepatitis C Virus Rapid Test	Positive by Commercially Available Test
Anti-HCV (any genotype)	plasma	329	329/329 (100%)	329/329 (100%)
Anti-HCV (any genotype)	Serum	26	26/26 (100%)	26/26 (100%)
Anti-HCV (genotype 1, 2, 3, 4 (non-subtype A), 4, 5, 6)	Serum/Plasma	151	151/151 (100%)	151/151 (100%)
Total		506	506/506 (100%)	506/506 (100%)

30 Serocoversion panels have been done and details of the 30 seroconversion are in the table below.

No.	Panel	Specimens No.	Results
1	PHV907	7	Positive from 0 days since first bleed
2	PHV908	13	Positive from 3 days since first bleed
3	PHV206(M)	25	/
4	PHV911(M)	5	Positive from 3 days since first bleed
5	PHV919	7	Positive from 28 days since first bleed
6	PHV920	10, No. 2 can't be got because ofout of stock from the vendor	Positive from 16 days since first bleed
7	HCV9047	10	Positive from 28 days since first bleed
8	HCV9046	5	Positive from 69 days since first bleed
9	HCV6229	8	Positive from 17 days since first bleed
10	HCV10041	3	Positive from 6 days since first bleed
11	HCV9041	8	Positive from 62 days since first bleed
12	HCV9045	8	Positive from 37 days since first bleed
13	HCV6222	3	Positive from 40 days since first bleed
14	HCV6224	8	Positive from 19 days since first bleed
15	HCV6227	7	Positive from 75 days since first bleed
16	HCV6228	12	Positive from 31 days since first bleed
17	HCV10071	7	Positive from 84 days since first bleed
18	HCV6220	6	Positive from 18 days since first bleed
19	HCV10185	5	Positive from 130 days since first bleed
20	HCV10235	5	Positive from 96 days since first bleed
21	HCV6215	4	Positive from 20 days since first bleed
22	HCV9042	6	Positive from 8 days since first bleed
23	HCV9058	5	Positive from 10 days since first bleed
24	HCV9094	5	Positive from 9 days since first bleed
25	HCV9095	5	Positive from 10 days since first bleed
26	HCV9055	11	Positive from 65 days since first bleed
27	HCV9054	10	Positive from 72 days since first bleed
28	HCV9044	6	Positive from 21 days since first bleed
29	HCV10165	9	Positive from 19 days since first bleed
30	HCV6226	12	Positive from 39 days since first bleed

Relative Specificity

A total of HCV 1259 negative specimens were tested using the HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) and a commercially available test (Table 2). The relative specificity of the test is ＞99.9% (95% confidence interval: 99.71% – 100%).
Table 2: Specificity of the HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette)

Population	Specimens Tested	Number of Specimens Tested	Negative by HCV Hepatitis C Virus Rapid Test	Negative by Commercially Available Test
Clinical Negative	Serum/plasma	202	202/202 (100%)	202/202 (100%)
Potentially cross-reacting	Serum/Plasma	30	30/30 (100%)	30/30 (100%)
Unselected Donors	Serum	1000	1000/1000 (100%)	1000/1000 (100%)
Inhibition Panel	Serum	27	27/27 (100%)	27/27 (100%)
Total		1259	1259/1259 (100%)	1259/1259 (100%)

Whole Blood vs. Serum vs. Plasma

Total 25 clinical negative samples (whole blood, serum, plasma) have been collected from patients in local hospital. The whole blood collected and separated into three tubes. One was stored as whole blood. One was collected into tube for plasma, one was collected into tube for serum (Table 3). There is a very good correlation of results between whole blood, serum, and plasma with HCV negative samples.
Table 3: A Comparison of HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) Specificity in negative Whole Blood and Paired Serum and Plasma Specimens

Specimen Type	Number of Specimens Tested	Negative by HCV Ab
Serum	25	25/25 (100%)
Plasma	25	25/25 (100%)
Whole blood	25	25/25 (100%)

A total of 25 positive specimens (whole blood, serum, plasma) were tested using the HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) (Table 4). There is a very good correlation of results between whole blood and paired plasma with HCV positive samples.

Table 4: A Comparison of HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) Specificity in positive Whole Blood and Paired Serum and Plasma Specimens.

Specimen Type	Number of Specimens Tested	Positive by HCV Ab
Serum	25	25/25 (100%)
Plasma	25	25/25 (100%)
Whole blood	25	25/25 (100%)

Precision

Intra Assay

Within-run precision has been determined by using 20 replicates of four specimens: a negative, a low positive, medium positive and a high positive. The negative, low positive, medium positive and high positive values were correctly identified >99% of the time.

Inter-Assay

Between-run precision has been determined by 5 independent assays on the same four specimens: a negative, a low positive, medium positive and a high positive. Three different lots of the HCV Hepatitis C Virus Rapid Test (Whole blood/Serum/Plasma)(Cassette) have been tested using negative, low positive, medium positive and high positive specimens. The specimens were correctly identified >99% of the time.

Cross Reactivity

No cross-reactivity was observed when samples positive for other diseases such as HIV, Syphilis, Infectious Mononucleosis, HBV, Rheumatoid Factor, HAMA, Hyper IgG, Hyper IgM, anti-HAV, anti-HSV2, anti-HEV, anti- EBV and anti-CMV were tested.

Interfering Substances

No interference was observed in samples with high concentrations of Uric acid,Ascorbic Acid, Hemoglobin, Gentistic Acid, Acetaminnophen, Oxalic Acid, Albumin, Caffein, Bilirubin, EDTA, Aspirin and Methanol.

Analytes	Conc	Analytes	Conc
Control	0	Control	0
Uric acid	0.15 mg/mL	Albumin	20 mg/mL
Ascorbic Acid	0.2 mg/mL	Caffein	0.2 mg/mL
Hemoglobin	5.0 mg/mL	Bilirubin	0.3 mg/mL
Gentistic Acid	0.2 mg/mL	EDTA	0.2 mg/mL
Acetaminnophen	1.0 mg/mL	Aspirin	0.2 mg/mL
Oxalic Acid	0.2 mg/mL	Methanol	1.0%

REFERENCE

1. Choo, Q.L., G.Kuo, A.J. Weiner, L.R. Overby, D.W. Bradley, and M. Houghton. Isolation of a cDNA clone derived from a blood-borne non-A, non-B viral hepatitis genome. Science 189; 244: 359
2. Kuo, G., Q.L. Choo, H.J. Alter, and M. Houghton. An assay for circulating antibodies to a major etiolog Virus of human non-A, non-B hepatitis. Science 1989; 244: 362
3. Van der Poel, C.L., H.T.M. Cuypers, H.W. Reesink, and P.N. Lelie. Confirmation of hepatitis C Virus infection by new four-antigen recombinant immunoblot assay. Lancet 1991; 337: 317
4. Wilber, J.C. Development and use of laboratory tests for hepatitis Cinfection: a review. J. Clin. Immunoassy 1993; 16: 204

INDEX OF SYMBOLS

	Consult instructions for use		Tests per kit	EC REP	Authorized Representative
IVD	For *in vitro* diagnostic use only		Use by		Do not reuse
	Store between 2-30°C	LOT	Lot Number	REF	Catalog #
	Manufacturer		Warning		

Healgen Scientific Limited Liability Company
Address: 3818 Fuqua Street, Houston, TX 77047, USA.
Tel: +1 713-733-8088 Fax: +1 713-733-8848
Website: www.healgen.com

EC REP QARAD b.v.b.a.
Cipalstraat 3, B-2440 Geel, Belgium

B21304-05
Revision Date: 2022-11-10

Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma)

CE

A rapid test for the qualitative detection of Myoglobin, CK-MB, and Troponin I in whole blood, serum or plasma.
For professional in vitro diagnostic use only.

INTENDED USE

The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) is a rapid chromatographic immunoassay for the qualitative detection of human Myoglobin, CK-MB and cardiac Troponin I in whole blood , serum or plasma as an aid in the diagnosis of myocardial infarction (MI).

SUMMARY

Myoglobin (MYO), Creatine Kinase MB (CK-MB) and cardiac Troponin I (cTnI) are proteins released into the bloodstream after cardiac injury. Myoglobin is a heme-protein normally found in skeletal and cardiac muscle with a molecular weight of 17.8 kDa. It constitutes about 2 percent of total muscle protein and is responsible for transporting oxygen within muscle cells1. When muscle cells are damaged, Myoglobin is released into the blood rapidly due to its relatively small size. The level of Myoglobin increases measurably above baseline within 2-4 hours post-infarct, peaking at 9-12 hours, and returning to baseline within 24-36 hours2,3. CK-MB is an enzyme also present in the cardiac muscle, with a molecular weight of 87.0 kDa4. Creatine Kinase is a dimeric molecule formed from two subunits designated as “M” and “B”, which combine to form three different isoenzymes, CK-MM, CK-BB and CK-MB. CK-MB is the isoenzyme of Creatine Kinase most involved in the metabolism of cardiac muscle tissue5. The release of CK-MB into the blood following an MI can be detected within 3-8 hours after the onset of symptoms. It peaks within 9 to 30 hours, and returns to baseline levels within 48 to 72 hours6. Cardiac Troponin I is a protein found in cardiac muscle, with a molecular weight of 22.5 kDa7. Troponin I is part of a three subunit complex comprised of Troponin T and Troponin C. Along with tropomyosin, this structural complex forms the main component that regulates the calcium sensitive ATPase activity of actomyosin in striated skeletal and cardiac muscle8. After cardiac injury occurs, Troponin I is released into the blood 4-6 hours after the onset of pain. The release pattern of Troponin I is similar to CK-MB, but while CK-MB levels return to normal after 72 hours, Troponin I remains elevated for 6-10 days, thus providing for a longer window of detection for cardiac injury.
The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) utilizes a combination of antibody coated particles and capture reagents to qualitatively detect Myoglobin, CK-MB and Troponin I in whole blood, serum or plasma. The minimum detection level is 50 ng/mL Myoglobin, 5 ng/mL CK-MB and 0.5 ng/mL Troponin I.

PRINCIPLE

The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) is a qualitative, membrane based immunoassay for the detection of Myoglobin, CK-MB and Troponin I in whole blood, serum
or plasma. The membrane is pre-coated with specific capture antibodies in each of the test line regions of the test. During testing, the whole blood, serum or plasma specimen reacts with the particle coated with specific antibodies. The mixture migrates upward on the membrane chromatographically by capillary action to react with specific capture reagents on the membrane and generate a colored line. The presence of this colored line in the specific test line region indicates a positive result, while its absence indicates a negative result. To serve as a procedural control, a colored line will always appear in the control line region indicating that proper volume of specimen has been added and membrane wicking has occurred.

REAGENTS

The test contains anti-Myoglobin antibody coated particles, anti-CK-MB antibody coated particles, anti-Troponin I antibody coated particles, and capture reagents coated on the membrane.

PRECAUTIONS

- For professional *in vitro* diagnostic use only. Do not use after expiration date.
- The test must remain in the sealed pouch until use.
- Do not eat, drink or smoke in the area where the specimens or kits are handled.
- Do not use if pouch is damaged.
- Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards throughout the procedure and follow the standard procedures for proper disposal of specimens.
- Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are being tested.
- Humidity and temperature can adversely affect results.
- The used test should be discarded according to local regulations.

STORAGE AND STABILITY

Store as packaged in the sealed pouch either at room temperature or refrigerated (2-30°C). The test is stable through the expiration date printed on the sealed pouch. The test must remain in the sealed pouch until use. Do not freeze. Do not use beyond the expiration date.

SPECIMEN COLLECTION AND STORAGE

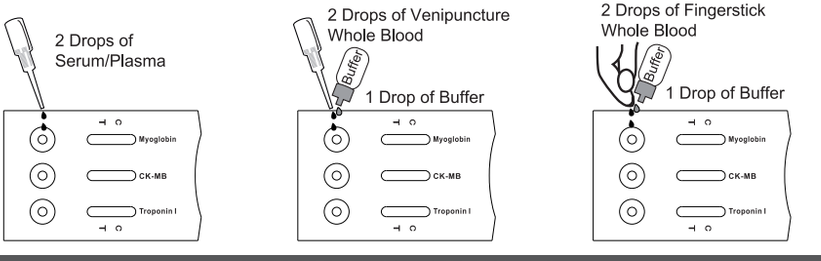
- The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) can be performed using whole blood (from venipuncture or fingerstick), serum or plasma.
- <u>To collect Fingerstick Whole Blood specimens:</u>
  - Wash the patient’s hand with soap and warm water or clean with an alcohol swab. Allow to dry.
  - Massage the hand without touching the puncture site by rubbing down the hand towards the fingertip of the middle or ring finger.
  - Puncture the skin with a sterile lancet. Wipe away the first sign of blood.
  - Gently rub the hand from wrist to palm to finger to form a rounded drop of blood over the puncture site.
  - Position the patient’s finger so that the drop of blood is just above the specimen well (S) of the test device.
  - Allow 2 hanging drops of fingerstick whole blood to fall into the specimen well (S) of the test device, or move the patient’s finger so that the hanging drop touches the specimen well (S). Avoid touching the finger directly to the specimen well (S).
- Separate serum or plasma from blood as soon as possible to avoid hemolysis. Use only clear, non-hemolyzed specimens.
- Testing should be performed immediately after specimen collection. Do not leave the specimens at room temperature for prolonged periods. Serum and plasma specimens may be stored at 2-8°C for up to 3 days. For long-term storage, specimens should be kept below -20°C. Whole blood collected by venipuncture should be stored at 2-8°C if the test is to be run within 2 days of collection. Do not freeze whole blood specimens. Whole blood collected by fingerstick should be tested immediately.
- Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. Specimens should not be frozen and thawed repeatedly.
- If specimens are to be shipped, they should be packed in compliance with local regulations covering the transportation of etiologic agents.

MATERIALS

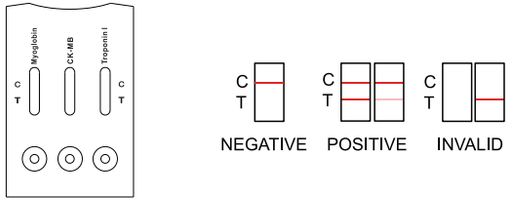
Materials Provided:
1. 25 Sealed pouches each containing a test cassette, a dropper and a desiccant 2. 1 Buffer, 4.0 mL
3. 1 Package insert
Materials Required But Not Provided:
1. Specimen collection containers 2. Lancets (for fingerstick whole blood only) 3. Centrifuge 4. Timer

PROCEDURE

Allow the test, specimen and/or controls to reach room temperature (15-30°C) prior to testing.
1. Bring the pouch to room temperature before opening it. Remove the test device from the sealed pouch and use it as soon as possible. Best results will be obtained if the test is performed immediately after opening the foil pouch.
2. Place the test device on a clean and level surface.
<u>For Serum or Plasma specimens:</u> Hold the dropper vertically and transfer 2 drops of serum or plasma (approximately 50 µL) to the specimen well (S) of the test device, then start the timer. See illustration below.
<u>For Venipuncture Whole Blood specimens:</u> Hold the dropper vertically and transfer 2 drops of venipuncture whole blood (approximately 50 µL) to the specimen well (S) of the test device, then add 1 drop of buffer (approximately 40 µL) and start the timer. See illustration below.
<u>For Fingerstick Whole Blood specimens:</u> Allow 2 hanging drops of fingerstick whole blood specimen (approximately 50 µL) to fall into the center of the specimen well (S) on the test device, then add 1 drop of buffer (approximately 40 µL) and start the timer. See illustration below.
3. Wait for the colored line(s) to appear. Read results at 10 minutes. Do not interpret results after 20 minutes.



INTERPRETATION OF RESULTS



(Please refer to the illustration above)
POSITIVE: A colored line in the control line region (C) and the presence of one or more colored lines in the test line regions indicates a positive result. This indicates that the concentration of Myoglobin, CK-MB and/or Troponin I is above the minimum detection level.
NEGATIVE: One colored line appears in the control line region (C). No apparent colored lines appear in any of the test line region(s). This indicates that the concentration of Myoglobin, CK-MB and Troponin I are below the minimum detection levels.
INVALID: Control line (C) fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test. If the problem persists, discontinue using the test kit immediately and contact your local distributor.

QUALITY CONTROL

An internal procedural control is included in the test. A colored line appearing in the control line region (C) is an internal procedural control. It confirms sufficient specimen volume, adequate membrane wicking and correct procedural technique.
Control standards are not supplied with this kit; however it is recommended that positive and negative controls be tested as a good laboratory practice to confirm the test procedure and to verify proper test performance.

LIMITATIONS

1. The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) is for *in vitro* diagnostic use only. This test should be used for the detection of Myoglobin, CK-MB, and Troponin I in whole blood, serum or plasma specimens only. Neither the quantitative value nor the rate of increase in Myoglobin, CK-MB and Troponin I can be determined by this qualitative test.
2. The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) will only indicate the qualitative level of Myoglobin, CK-MB and Troponin I in the specimen and should not be used as the sole criteria for the diagnosis of myocardial infarction.
3. The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) cannot detect less than 50 ng/mL Myoglobin, 5 ng/mL CK-MB and 0.5 ng/mL Troponin I in specimens. A negative result at any time does not preclude the possibility of myocardial infarction.
4. As with all diagnostic tests, all results must be interpreted together with other clinical information available to the physician.
5. Unusually high titers of heterophile antibodies or rheumatoid factor (RF) may affect the results. Even if test results are positive, further clinical evaluation should be considered with other clinical information available to the physician.
6. There is a slight possibility that some whole blood specimens with very high viscosity or which have been stored for more than 2 days may not run properly on the test device. Repeat the test with a serum or plasma specimen from the same patient using a new test device.

EXPECTED VALUES

The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) has been compared with a leading commercial Myoglobin/CK-MB/T EIA test, demonstrating an overall accuracy of 98.0% with Myoglobin, 99.8% with CK-MB, and 98.5% with Troponin I.

PERFORMANCE CHARACTERISTICS

Sensitivity and Specificity

The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) has been evaluated with a leading commercial Myoglobin/CK-MB/Troponin I EIA test using clinical specimens. The results show that relative to leading EIA tests, the Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) exhibits 100% sensitivity and 97.7% specificity for Myoglobin, 100% sensitivity and 99.8% specificity for CK-MB, and 98.7% sensitivity and 98.4% specificity for Troponin I.

Myoglobin Test vs. EIA

Method		EIA		Total
Myoglobin Test	Results	Positive	Negative	Results
	Positive	60	9	69
	Negative	0	374	374
Total Results		60	383	443

Relative Sensitivity: 100% (94.0%-100.0%)*
Relative Specificity: 97.7% (95.6%-98.9%)*
Accuracy: 98.0% (96.2%-99.1%)*
* 95% Confidence Interval

CK-MB Test vs. EIA

Method		EIA		Total
CK-MB Test	Results	Positive	Negative	Results
	Positive	54	1	55
	Negative	0	422	422
Total Results		54	423	477

Relative Sensitivity: 100% (93.4%-100.0%)*
Relative Specificity: 99.8% (98.7%-99.9%)*
Accuracy: 99.8% (98.8%-99.9%)*
* 95% Confidence Interval

Troponin I Test vs. EIA

Method		EIA		Total
Troponin I Test	Results	Positive	Negative	Results
	Positive	225	8	233
	Negative	3	505	508
Total Results		228	513	741

Relative Sensitivity: 98.7% (96.2%-99.7%)*
Relative Specificity: 98.4% (97.0%-99.3%)*
Accuracy: 98.5% (97.4%-99.3%)*
* 95% Confidence Interval

Precision

Intra-Assay
Within-run precision has been determined by using replicates of 10 tests for each of three lots using Myoglobin specimen levels at 0 ng/mL, 50 ng/mL and 400 ng/mL, CK-MB specimen levels at 0 ng/mL, 5 ng/mL and 40 ng/mL and Troponin I specimen levels at 0 ng/mL, 1 ng/mL and 10 ng/mL. The specimens were correctly identified >99% of the time.
Inter-Assay
Between-run precision has been determined by 3 independent assays on the same fifteen specimens: 0 ng/mL, 50 ng/mL and 400 ng/mL of Myoglobin, 0 ng/mL, 5 ng/mL and 40 ng/mL of CK-MB and 0 ng/mL, 1 ng/mL and 10 ng/mL of Troponin I. Three different lots of the Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) have been tested using these specimens. The specimens were correctly identified >99% of the time.
Cross-Reactivity
Sera containing known amounts of 10,000 ng/mL Skeletal Troponin I, 2,000 ng/mL Troponin T, 1,390 ng/mL CK-MM, 1,000 ng/mL CK-BB and 20,000 ng/mL Cardiac Myosin have been tested. No cross-reactivity was observed, indicating that the Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) has a high degree of specificity for Myoglobin, CK-MB and Troponin I.
Interfering Substances
The Myoglobin/CK-MB/Troponin I Combo Rapid Test Cassette (Whole Blood/Serum/Plasma) has been tested and no interference was observed in specimens containing 110 mg/mL human albumin, 6 mg/mL bilirubin, 10 mg/mL hemoglobin, 5 mg/mL cholesterol and 15 mg/mL triglycerides.

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INDEX OF SYMBOLS

	Consult instructions for use	Σ	Tests per kit	EC REP	Authorized Representative
IVD	For *in vitro* diagnostic use only		Use by		Do not reuse
2°C 30°C	Store between 2~30°C	LOT	Lot Number	REF	Catalog#

Zhejiang Orient Gene Biotech Co.,Ltd
Address: 3787#, East Yangguang Avenue, Dipu Street,
Anji 313300, Huzhou, Zhejiang, China
Tel: +86-572-5226111 Fax: +86-572-5226222
Website: www.orientgene.com

EC REP Shanghai International Holding Corp. GmbH (Europe)
Add: Eiffestrasse 80, 20537 Hamburg, Germany

REF GDCAR-W435a

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