

Date: 05/Jan/2023

## **STATEMENT**

We, Atlas Medical having a registered office at Ludwig-Erhard-Ring 3, 15827 Blankenfelde-Mahlow, Berlin, Germany assign SRL Sanmedico having a registered office at A. Corobceanu Street 7A, apt.9, Chisinau MD-2012, Moldova, as authorized representative in correspondence with the conditions of directive 98/79/EEC.

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.

On Behalf of Manufacturer:

General Manager

Haya Amawi

Signature

Atlas Medical GmbH

> 2Ludwig - Erhard Ring 3

15827 Blankenfelde - Mahlow Tel. (0049) 33708 - 355030

Atlas Medical: Ludwig-Erhard-Ring 3, 15827 Blankenfelde-Mahlow, Berlin, Germany, Tel:+4933708355030

Regulatory Office: William James House, Cowley Rd, Cambridge, CB4 0WX, United Kingdom Tel: +44 (0) 1223 858 910

Middle East Site: P.O Box 204, King Abdullah II Industrial Estate, Amman, 11512, Jordan Tel: +962 6 4026468



Declaration Ref No: DC22-0065

## **CE Declaration of Conformity**

According to Annex III of the IVD Directive 98/79/EC

#### We,

#### Atlas Medical GmbH

Head office: Ludwig-Erhard-Ring 3 Blankenfelde-Mahlow, Germany. Tel: +49 - 33708 – 3550 30 Email: info@atlas-medical.com

Manufacturing Site: Sahab Free Zone Area, P. O. Box 204, Amman 11512, Jordan.

Tel.: +962 6 4026468
Fax: +962 6 4022588
Email: info@atlas-medical.com

Declare our responsibility that the following product:

#### See Attached list

- Comply with all essential requirements (AnnexI) of the IVD Directive 98/79/EC. This
  compliance has been properly documented and covers the items listed in Annex I of the IVD
  Directive.
- This product is produced under Atlas quality system (ISO13485:2016) issued by GMED: Certificate No.: 36655 rev 1

Expiry Date: October 8 th.2023

Comply with the essential requirements of following standards (EN 18113-1, -2,-4:2011, EN ISO 15223:2016, EN ISO 23640:2015, EN ISO 14971:2019, ISO 2859/1:1999, EN ISO 13612:2002, EN ISO 13641:2002.

#### And

Intended for In-Vitro Professional use only.

Manufacturer
Atlas Medical
Ludwig-Erhard-Ring 3
Blankenfelde-Mahlow, Germany.



Atlas	Issue date Date of review		Management approval	MRXDO10F.10
Medical	May.2022	21.05.2022		08.02.2011

## **CE Declaration of Conformity**

## According to Annex III of the IVD Directive 98/79/EC

Item code	Product Description
8.00.01.0.0100	Atlas CRP Latex Kit with Buffer (100 Tests)
8.00.05.0.0100	Atlas RF Latex kit with Buffer(100 Tests)
8.00.11.0.0050	Atlas SLE Latex kit (50 Tests)
8.00.11.0.0100	Atlas SLE Latex kit (100 Tests)
8.00.12.0.0100	Atlas Staphylococcus Latex Kit (100 Tests)
8.00.17.0.0050	Atlas D-Dimer Latex Kit (50 Tests)
8.00.19.3.0100	Atlas TPHA Kit (100 Tests)
8.00.19.3.0200	Atlas TPHA Kit (200 Tests)
8.00.20.3.2500	Atlas VDRL Kit, 5ml+55ml buffer
8.04.38.0.0020	Atlas Fecal Occult Blood Test (FOB) Test Cassette , 20
	Tests/Box
8.04.85.0.0050	Atlas Fecal Occult Blood Test (FOB) Test Strip, 50 Tests/Box
8.04.109.0.0020	Atlas Procalcitonin test (PCT), 20 Tests/Box
8.16.78.0.0025	Atlas Calprotectin Test Cassette , 25 Tests/Box
8.04.45.0.0001	Atlas Troponin I Test Cassette, Bulk
8.04.45.0.0020	Atlas Troponin I Test Cassette , 20 Tests/Box.
8.04.45.0.0030	Atlas Troponin I Test Cassette , 30 Tests/Box.
8.04.46.0.0001	Atlas Myoglobin Test Cassette, Bulk
8.04.46.0.0020	Atlas Myoglobin Test Cassette , 20 Tests/Box.
8.04.46.0.0030	Atlas Myoglobin Test Cassette , 30 Tests/Box.
8.04.47.0.0001	Atlas CK-MB Test Cassette , Bulk.
8.04.47.0.0020	Atlas CK-MB Test Cassette , 20 Tests/Box.
8.04.47.0.0030	Atlas CK-MB Test Cassette , 30 Tests/Box.
8.04.48.0.0001	Atlas Cardiac Triple Tests Cassette (Troponin I, CK-MB,
	Myoglobin), Bulk.
8.04.48.0.0020	Atlas Cardiac Triple Tests Cassette (Troponin I, CK-MB,
	Myoglobin), 20 Tests/Box.
8.04.48.0.0030	Atlas Cardiac Triple Tests Cassette (Troponin I, CK-MB,
0.4.4.0.4.0006	Myoglobin), 30 Tests/Box.
8.14.19.1.0096	Helicobacter pylori Antigen ELISA, 96 Tests.
8.51.00.0.0096	25-OH VITAMIN D Elisa Kit, 96 Tests.
8.57.00.0.0096	Vitamin B12 Elisa Kit, 96 Tests





Declaration Ref No: DC21-0035

## **CE Declaration of Conformity**

According to Annex III of the IVD Directive 98/79/EC

We,

#### **Atlas Medical**

Head office: Ludwig-Erhard-Ring 3
Blankenfelde-Mahlow, Germany.
Tel: +49 - 33708 – 3550 30
Email: info@atlas-medical.com

Middle East Site: Sahab Free Zone Area, P. O. Box 212555, Amman, Jordan.

Tel.: +962 6 4026468

Fax: +962 6 4022588

Email: info@atlas-medical.com

Declare our responsibility that the following product:

#### See Attached list

- Comply with all essential requirements (AnnexI) of the IVD Directive 98/79/EC. This
  compliance has been properly documented and covers the items listed in Annex I of the
  IVD Directive.
- This product is produced under Atlas quality system (ISO13485:2016) issued by GMED:

Certificate N<sup>0</sup>.: 36655 rev 1 Expiry Date: October 8 th.2023

Comply with the essential requirements of following standards (EN 18113-1, -2,-4:2011, EN ISO 15223:2016, EN ISO 23640:2015, EN ISO 14971:2019, ISO 2859/1:1999, EN ISO 13612:2002, EN ISO 13641:2002.

And Intended for In-Vitro Professional use only.

Manufacturer
Atlas Medical
Ludwig-Erhard-Ring 3
Blankenfelde-Mahlow, Germany.

Blankenfe	elde-Mahlow , G	Germany.	Atlas Medical  Atlas Medical	
Atlas	Issue date	Date of review	Quality Diagnostic  Management approval	MRXDO10F.10
Medical	March.2021	09.03.2021		08.02.2011



## **CE Declaration of Conformity**

## According to Annex III of the IVD Directive 98/79/EC

Product Description
8.00.02.0.0100: ASO Latex Kit, 100 Tests (4ml Latex, 2x1.0ml controls).
8.00.00.0.0100: CRP Latex Kit, 100 Tests (4 ml Latex, 2x1.0 ml Controls)
8.00.04.0.0100: RF Latex Kit, 100 Tests (4ml Latex, 2x1.0ml controls)
8.00.17.0.0100: D-Dimer Latex Kit, 100 Tests
8.00.13.0.0300: Streptococcus Latex Kit, 6 Groups, 6x50 Tests (5x1.5ml Latex
(A,B,C,G,F), 1x3ml Latex(D), 1x1.0ml Positive Control, 1x2ml Extraction Reagent E,
1x1.5ml Extraction Reagent 1, 1x1.5ml Extraction Reagent 2, 2x2.5ml Extraction Reagent
3. Stirring Sticks, Glass Slide).

8.00.18.3.0500 : RPR Syphilis (Coarse Grain) Kit, 500 Tests (10 ml latex, 2x1ml control) Without card, stirring sticks.

8.00.18.3.1000 RPR Carbon Antigen (Coarse Grain) Kit, 1000 Tests (Reagent only).





# **CERTIFICAT**CERTIFICATE OF REGISTRATION

N° 36655 rev.1

#### GMED certifie que le système de management de la qualité développé par

GMED certifies that the quality management system developed by

# ATLAS MEDICAL GmbH Ludwig-Erhard-Ring 3 15827 Blankenfelde-Mahlow GERMANY

pour les activités

for the activities

Conception et développement, fabrication et vente de dispositifs médicaux de diagnostic in vitro .

Design and Development, Manufacturing and Sales of in vitro diagnostic medical devices.

réalisées sur le(s) site(s) de performed on the location(s) of

Voir addendum

See addendum

est conforme aux exigences des normes internationales complies with the requirements of the international standards

ISO 13485: 2016

Début de validité / Effective date October 9th, 2020 (included) Valable jusqu'au / Expiry date : October 8th, 2023 (included)

Etabli le / Issued on : October 8th, 2020

On be

On behalf of the President Béatrice LYS

**Technical Director** 

DocuSigned by:

GMED N° 36655-1

Ce certificat est délivré selon les règles de certification GMED / This certificate is issued according to the rules of GMED certification

Renouvelle le certificat 36655-0

RECEITIFICATION DE SYSTEMES DE MANAGEMENT
A Loste des sites accrédit et et portée disponible su www.cofrac.fr

GMED •

**GMED** • Société par Actions Simplifiée au capital de 300 000 € • Organisme Notifié/Notified Body n° 0459 Siège social : 1, rue Gaston Boissier - 75015 Paris • Tél. : 01 40 43 37 00 • gmed.fr



Addendum au certificat n° 36655 rev. 1 page 1/1 Addendum of the certificate n° 36655 rev. 1 Dossier / File N°P601408

#### Ce certificat couvre les activités et les sites suivants :

This certificate covers the following activities and sites:

#### French version:

Conception et développement, fabrication et vente de dispositifs médicaux de diagnostic *in vitro* à usage professionnel et/ ou d'autodiagnostic, dans les domaines du groupage sanguin, de la microbiologie, de la biochimie, de la toxicologie, de l'oncologie, de la cardiologie, de l'histologie, de l'endocrinologie et des maladies infectieuses, dans les techniques d'Agglutination/ ELISA/ Tests rapides/ Colorimétrie/ Disques antibiotiques.

#### English version:

Design and Development, Manufacturing and Sales of in vitro diagnostic medical devices for professional use and/or for self-testing, in the field of Immunohematology, Microbiology, Biochemistry, Toxicology, Oncology, Cardiology, Histology, Endocrinology Biosensors and Infectious diseases, in techniques of Agglutination/ELISA/Rapid tests/Colorimetry/Antibiotic disks.

ATLAS MEDICAL GmbH Ludwig-Erhard-Ring 3 15827 Blankenfelde-Mahlow GERMANY

French version:

Siège social, responsable de la mise sur le marché

English version:

Headquarter, legal manufacturer

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Sahab Industrial Zone Area King Abdullah II Industrial City Amman 11512 JORDAN

French version:

Conception, fabrication et contrôle final

English version:

Design, manufacture and final control

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

William James House Cowley Road, Cambridge, CB OWX United Kingdom

French version:

Contact réglementaire

English version:

Regulatory Administration

\*\*\*\*\*\*\*\*\*\*\*\*

3 sites / 3 sites

Bratrice Lys

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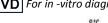
On behalf of the President Béatrice LYS Technical Director





#### **ANTISTREPTOLYSIN-O (ASO) LATEX SLIDE TEST**

For the qualitative and quantitative measurement of antibodies to Antistreptolysin-O in human serum.



IVD For in -vitro diagnostic and professional use only



#### INTENDED USE

ATLAS ANTISTREPTOLYSIN-O (ASO) latex slide Test is used for the qualitative and quantitative measurement of antibodies to Antistreptolysin-O in human serum.

#### INTRODUCTION

The group A ß-hemolytic streptococci produces various toxins that can act as antigens. One of these exotoxins streptolysin-O, was discovered by Todd in 1932.

A person infected with group A -hemolytic streptococci produces specific antibodies against these exotoxins, one of which is antistreptolysin-O. The quantity of this antibody in a patient's serum will establish the degree of infection due to the -hemolytic streptococcal.

The usual procedure for the determination of the antistreptolysin titer is based on the inhibitory effect that the patient's serum produces on the hemolytic power of a pretitrated and reduced streptolysin-O. However, the antigenantibody reaction occurs independently of the hemolytic activity of streptolysin-O. This property enables the establishment of a qualitative and quantitative test for the determination of the antistreptolysin-O by agglutination of latex particles on slide.

#### PRINCIPLE

ASO test method is based on an immunologic reaction between streptococcal exotoxins bound to biologically inert latex particles and streptococcal antibodies in the test sample. Visible agglutination occurs when increased antibody level, are present in the test specimen.

#### MATERIALS **MATERIALS PROVIDED**

- ASO Latex Reagent: Latex particles coated with streptolysin O, pH, 8,2. Preservative
- ASO Positive Control(Red cap): Human serum with an ASO concentration > 200 IU/mL.Preservative
- ASO Negative Control (Blue cap) Animal serum. Preservative
- Reaction Slide.
- Stirring Sticks.

#### MATERIALS REQUIRED BUT NOT PROVIDED

- Timer.
- Test Tubes 12x75mm.
- Test Tube Rack.
- Serological pipettes.
- High intensity light.
- Saline Solution, 0.9% NaCL.

#### **PRECAUTIONS**

- All reagents contain 0.1% (w/v) sodium azide as a preservative. Store all reagents at 2-8°C. DO NOT FREEZE.
- Reagents containing sodium azide may be combined with copper and lead plumbing to form highly explosive metal azides. Dispose of reagents by flushing with large amounts of water to prevent azide build-up.
- For In Vitro diagnostic use.
- Positive and negative controls prepared using human serum found negative for hepatitis B surface antigen (HBsAg) and HIV-III by FDA required test; however, handle controls as if potentially infectious.

#### REAGENT STORAGE AND STABILITY

- Reagents are stable until specified expiry date on bottle label when stored refrigerated (2-8°C).
- DO NOT FREEZE.
- The ASO Latex Reagent, once shaken must be uniform without visible clumping. When stored refrigerated, a slight sedimentation may occur and should be considered normal.
- Do not use the latex reagent or controls if they become contaminated.

#### SPECIMEN COLLECTION AND STORAGE

- Use fresh serum collected by centrifuging clotted blood.
- If the test cannot be carried out on the same day, store the specimen for 7 days at 2-8(C and for 3 months at -20(C.

- For longer periods the sample must be frozen.
- As in all serological tests, hemolytic or contaminated serum must not be used.
- DO NOT USE PLASMA.

#### **PROCEDURE**

#### Qualitative method

- 1. Allow the reagents and samples to reach room temperature. The sensitivity of the test may be reduced at low temperatures.
- 2. Place 50 µL of the sample and one drop of each Positive and Negative controls into separate circles on the slide
- 3. Mix the ASO-latex reagent vigorously or on a vortex mixer before using and add one drop (50 µL) next to the sample to be tested.
- 4. Mix the drops with a stirrer, spreading them over the entire surface of the circle. Use different stirrers for each sample.
- 5. Place the slide on a mechanical rotator at 80-100 r.p.m. for 2 minutes. False positive results could appear if the test is read later than two minutes.

#### Semi-quantitative method

- 1. Make serial two fold dilutions of the sample in 9 g/L saline solution.
- 2. Proceed for each dilution as in the qualitative method.

#### QUALITY CONTROL

Positive and Negative Controls should be included in each test batch.

Acceptable performance is indicated when a uniform milky suspension with no agglutination is observed with the ASO Negative Control and agglutination with large aggregates is observed with the ASO Positive Control.

#### RESULTS

#### A.QUALITATIVE TEST:

A negative reaction is indicated by a uniform milky suspension with no agglutination as observed with the ASO Negative Control.

A positive reaction is indicated by any observable agglutination in the reaction mixture. The specimen reaction should be compared to the ASO Negative Control (Fig. 1).

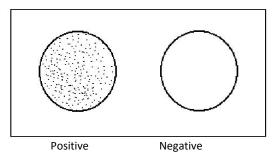


Figure 1

#### B.QUANTITATIVE TEST

A positive reaction is indicated by any observable agglutination in the reaction mixture. Record the last dilution showing a positive reaction. Concentration of ASO can be determined by multiplying the last positive dilution factor of the sample with the concentration of the positive control (200 IU/ml).

The titer of the serum is the reciprocal of the highest dilution which exhibits a positive reaction.

IU/ml of sample = conc. of positive control (200) x specimen titer

<u>DILUTION</u>	<u>IU/ml</u>
1:1	200
1:2	400
1:4	800
1:8	1600
Ftc	

#### REFERENCE VALUES

Up to 200 IU/mL(adults) and 100 IU/mL (children < 5 years old)<sup>6</sup>. Each laboratory should establish its own reference range.

#### PERFORMANCE CHARACTERISTICS

Analytical sensitivity:

200 (±50) IU/ml.

PROZONE EFFECT

No prozone effect was detected up to 1500IU/ml.

**SENSITIVITY** 

98%.

**SPECIFICITY** 

97%.

#### **INTERFERENCES**

#### **NON INTERFERING SUBSTANCES:**

- Hemoglobin (10g/dl)
- Bilirubin(20mg/dl)
- Lipemia(10g/dl)

Other substances may interfere

#### REFERENCES

- Haffejee . Quarterly Journal of Medicine 1992. New series 84; 305: 641-658.
- 2. Ahmed Samir et al. Pediatric Annals 1992; 21: 835-842.
- 3. Spaun J et al. Bull Wld Hlth Org 1961; 24: 271-279.
- 4. The association of Clinical Pathologists 1961. Broadsheet 34.
- 5. Picard B et al. La Presse Medicale 1983; 23: 2-6.
- 6. Klein GC. Applied Microbiology 1971; 21: 999-1001.
- Young DS. Effects of drugs on clinical laboratory test, 4th ed. AACC Press, 1995.

## **ATLAS Medical**

William James House, Cowley Road, Cambridge, CB4 4WX, UK

Tel: ++44 (0) 1223 858 910 Fax: ++44 (0) 1223 858 524

#### PPI003A01

#### Rev H (09.09.2017)

REF	Catalogue Number		Store at
IVD	For In-Vitro Diagnostic use	$\triangle$	Caution
Σ	Number of tests in the pack	(i	Read product insert before use
LOT	Lot (batch) number		Manufacturer
Ţ	Fragile, handle with care	><	Expiry date
	Manufacturer fax number	<b>®</b>	Do not use if package is <b>damaged</b>
	Manufacturer telephone		



#### ATLAS C-REACTIVE PROTEIN (CRP) LATEX KIT

For the qualitative and semi-quantitative measurement of C-reactive protein (CRP) in human serum.



**IVD** For in -vitro diagnostic and professional use only



#### **INTENDED USE**

Atlas C-Reactive Protein (CRP) is used to measure the CRP in human serum qualitatively and semi- quantitatively.

#### INTRODUCTION

C-reactive protein (CRP), the classic acute-phase of human serum, is synthesized by hepatocytes. Normally, it is present only in trace amounts in serum, but it can increase as much as 1,000-fold in response to injury or infection. The clinical measurement of CRP in serum therefore appears to be a valuable screening test for organic disease and a sensitive index of disease activity in inflammatory, infective and ischemic conditions. MacLeod and Avery found that antibody produced against purified CRP provided a more sensitive test than the C-polysaccharide assay. Since that time a number of immunological assays have been devised to measure CRP such as capillary precipitation, double immunodiffusion and radical immunodiffusion.

The CRP reagent kit is based on the principle of the latex agglutination assay described by Singer and Plotz. The major advantage of this method is the rapid two (2) minute reaction time.

#### **PRINCIPLE**

The CRP reagent kit is based on an immunological reaction between CRP Antisera bound to biologically inert latex particles and CRP in the test specimen. When serum containing greater than 6 mg/L CRP is mixed with the latex reagent, visible agglutination occurs.

#### **MATERIALS**

#### **MATERIALS PROVIDED**

 CRP Latex Reagent:Latex particles coated with goat IgG anti-human CRP, pH 8.2 MIX WELL BEFORE USE.

- CRP Positive Control Serum: A stabilized pre-diluted human serum containing >20mg/L CRP.
- CRP Negative Control Serum: A stabilized pre-diluted animal serum.
- Glass Slides.
- Stirring Sticks.

#### MATERIALS REQUIRED BUT NOT PROVIDED

- Mechanical rotator with adjustable speed at 80-100 r.p.m.
- Vortex mixer.
- Pippetes 50 uL.
- Glycine Buffer (20x): add one part to nineteen parts of distilled water before use.

#### **PRECAUTIONS**

- Reagents containing sodium azide may be combined with copper and lead plumbing to form highly explosive metal azides. Dispose of reagents by flushing with large amounts of water to prevent azide buildup.
- For In Vitro diagnostic use.
- Positive and negative controls prepared using human serum found negative for hepatitis B surface antigen (HBsAg) by FDA required test; however. handle controls as if potentially infectious.
- Accuracy of the test depends on the drop size of the latex reagent (40µl). Use only the dropper provided with the latex and hold perpendicularly when dispensing.
- Glass slides should be thoroughly rinsed with water and wiped with lint-free tissue after each use.

#### STORAGE AND STABILITY

Reagents are stable until specified expiry date on bottle label when stored refrigerated (2 - 8°C).

#### DO NOT FREEZE.

- The CRP latex reagent, once shaken must be uniform without visible clumping. When stored refrigerated, a slight sedimentation may occur and should be considered normal.
- Do not use the latex reagent or controls if they become contaminated.

#### SPECIMEN COLLECTION AND STORAGE

 Use fresh serum collected by centrifuging clotted blood.

- If the test cannot be carried out on the same day, store the specimen for 7 days at 2-8 °C and for 3 months at -20°C.
- For longer periods the sample must be frozen.
- As in all serological tests, hemolytic or contaminated serum must not be used.
- Do not use plasma.

#### **PROCEDURE**

#### A.QUALITATIVE TEST:

- 1. Allow the reagents and samples to reach room temperature. The sensitivity of the test may be reduced at low temperatures.
- 2. Place 40 µL of the sample and one drop of each Positive and Negative controls into separate circles on the slide test.
- 3. Mix the CRP-latex reagent vigorously or on a vortex mixer before using and add one drop (40 µL) next to the samples to be tested.
- 4. Mix the drops with a stirrer, spreading them over the entire surface of the circle. Use different stirrers for each sample.
- 5. Place the slide on a mechanical rotator at 80-100 r.p.m. for 2 minutes. False positive results could appear if the test is read later than two minutes.

#### **B.SEMI-QUANTITATIVE TEST:**

- 1. Make serial two fold dilutions of the sample in 9 g/L saline solution.
- 2. Proceed for each dilution as in the qualitative method.

#### **QUALITY CONTROL**

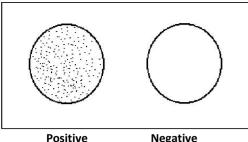
Positive and Negative controls are recommended to monitor the performance of the procedure, as well as a comparative pattern for a better result interpretation.

All result different from the negative control result, will be considered as a positive.

#### INTERPRETATION OF RESULTS **A.QUALITATIVE TEST:**

A **negative** reaction is indicated by a uniform milky suspension with no agglutination as observed with the CRP Negative Control.

A **positive** reaction is indicated by any observable agglutination in the reaction mixture. The specimen reaction should be compared to the CRP Negative Control (Fig. 1).



**Negative** 

Figure 1

#### **B. Semi-QUANTITATIVE TEST:**

The approximate CRP concentration in the patient sample is calculated as follow:

6×CRP titer = ---- mg/L

#### **INTERFERENCES**

#### NONE INTERFERING SUBSTANCES:

- Hemoglobin (10g/dl)
- Bilirubin(20mg/dl)
- Lipemia(10g/dl)
- Other substances interfere, such as RF (100IU/ml).

#### NOTE

- High CRP concentration samples may give negative results .Retest the sample again using a drop of 20µl.
- The strength of agglutination is not indicative of the CRP concentration in the samples tested.
- Clinical diagnosis should not be made on findings of a single test result, but should integrate both clinical and laboratory data.

#### LIMITATIONS

- Reaction time is critical. If reaction time exceeds two (2) minutes, drying of the reaction mixture may cause false positive results.
- 2. Freezing the CRP Latex Reagent will result in spontaneous agglutination.
- Intensity of agglutination is not necessarily indicative of relative CRP concentration; therefore, screening reactions should not be graded.
- 4. A false negative can be attributed to a prozone phenomenon (antigen excess). It is recommended, therefore, to check all negative sera by retesting at a 1:10 dilution with glycine buffer.

#### REFERENCE VALUES

Up to 6 mg/L. Each laboratory should establish its own reference range.

#### PERFORMANCE CHARACTERISTICS

- Sensitivity: 6(5-10) mg/L
- **Prozone effect:** No prozone effect was detected up to 1600 mg/L
- Diagnostic sensitivity: 95.6 %.
- Diagnostic specificity: 96.2 %.

#### REFERENCES

- Pepys, M.B.. Lancet 1:653 (1981).
- 2. Werner, M.. Clin.Chem. Acta 25:299 (1969).
- MacLeod, C.M., et. al.. J. Exp. Med 73:191 (1941).
- Wood, HF., et. al.. J. Clin. Invest. 30: 616 (1951).
- Mancini, G., et. al. Immunochemistry 2:235 (1965).
- Singer, J.M., et. al.. Am. J. Med 21: 888 (1956).
- 7. Fischer, C.L., Gill,. C.W.. In Serum Protein Abnormalities. Boston, Little, Brown and Co., (1975).

#### ATLAS MEDICAL

William James House, Cowley Road, Cambridge, CB4 OWX, UK Tel: +44 (0) 1223 858 910 Fax: +44 (0) 1223 858 524

#### PPI005A01

#### Rev H (06.06.2017)

REF	Catalogue Number	1	Store at
IVD	For In-Vitro Diagnostic use	$\triangle$	Caution
Σ	Number of tests in the pack	[]i	Read product insert before use
LOT	Lot (batch) number		Manufacturer
Ī	Fragile, handle with care	2	Expiry date
	Manufacturer fax number	<b>®</b>	Do not use if package is damaged
	Manufacturer telephone number		



#### ATLAS RHEUMATOID FACTOR (RF) LATEX KIT

latex slide test for the qualitative and semi-quantitative measurement of RF in human serum.

IVD For In-Vitro diagnostic and professional use only



#### **INTENDED USE**

A latex slide test for the qualitative and semi-quantitative measurement of RF in human serum.

#### INTRODUCTION

Rheumatoid factors (RF) are antibodies directed against antigenic sites in the Fc fragment of human and animal IgG . Their frequent occurrence in rheumatoid arthritis makes them useful for diagnosis and monitoring of the disease.

One method used for rheumatoid factor detection is based on the ability of rheumatoid arthritis sera to agglutinate sensitized sheep red cells, as observed by Waaler and Rose A more sensitive reagent consisting of biologically inert latex beads coated with human gamma globulin was later described by Singer and Plotz. The RF kit is based on the principle of the latex agglutination assay of Singer and Plotz .The major advantage of this method is rapid performance (2 minute reaction time) and lack of heterophile antibody interference.

#### PRINCIPLE

The RF reagent is based on an immunological reaction between human IgG bound to biologically inert latex particles and rheumatoid factors in the test specimen. When serum containing rheumatoid factors is mixed with the latex reagent, visible agglutination occurs.

#### **MATERIALS**

#### **MATERIALS PROVIDED**

- RF Latex Reagent: Latex particles coated with human gamma-globulin, pH, 8,2. Preservative. Contains N, N-dimethylformamide.
- RF Positive Control Serum: Human serum with a RF concentration > 30 IU/mL.Preservative.

- RF Negative Control Serum:Animal serum.
   Preservative.
- Reaction Slide
- Stirring sticks

#### MATERIALS REQUIRED BUT NOT PROVIDED

- Timer
- Test Tubes (for dilution)
- Serological pipettes (for sample addition and for dilution)
- Rotator (optional)
- Glycine Buffer (20x): add one part to nineteen parts of distilled water before use.

#### **PRECAUTIONS**

- All reagents contain 0.1 %( w/v) sodium azide as a preservative.
- Reagents containing sodium azide may be combined with copper and lead plumbing to form highly explosive metal azides. Dispose of reagents by flushing with large amounts of water to prevent azide buildup.
- For In Vitro diagnostic use.
- Positive and negative controls prepared using human serum found negative for hepatitis B surface antigen (HBsAg) by FDA required test; however, handle controls as if potentially infectious.
- Accuracy of the test depends on the drop size of the latex reagent (40µl). Use only the dropper supplied with latex and hold it perpendicularly when dispensing.
- Use a clean pipette tip and stirring stick for each specimen, and glass slides should be thoroughly rinsed with water and wiped with lint-free tissue after each use.
- Check reactivity of the reagent using the controls provided.

#### STORAGE AND STABILITY

- Reagents are stable until specified expiry date on bottle label when stored refrigerated (2-8°C).
- Do not freeze.
- The RF latex reagent, once shaken must be uniform without visible clumping. When stored refrigerated, a slight sedimentation may occur and should be considered normal.
- Do not use the latex reagent or controls if they become contaminated.

#### SPECIMEN COLLECTION AND STORAGE

- Use fresh serum collected by centrifuging clotted blood.
- If the test cannot be carried out on the same day, store the specimen for 7 days at 2-8°C and for 3 months at -20°C.
- As in all serological tests, hemolytic or contaminated serum must not be used.
- Do not use PLASMA.

#### **PROCEDURE**

#### Qualitative method

- Allow the reagents and samples to reach room temperature. The sensitivity of the test may be reduced at low temperatures.
- 2. Place 50  $\mu L$  of the sample and one drop of each Positive and Negative controls into separate circles on the slide test.
- 3. Mix the RF-latex reagent rigorously or on a vortex mixer before using and add one drop (50  $\mu$ L) next to the sample to be tested.
- Mix the drops with a stirrer, spreading them over the entire surface of the circle. Use different stirrers for each sample.
- 5. Place the slide on a mechanical rotator at 80-100 r.p.m. for 2 minutes. False positive results could appear if the test is read later than two minutes.

#### Semi-quantitative method

- Make serial two fold dilutions of the sample in 9 g/L saline solution.
- 2. Proceed for each dilution as in the qualitative method.

#### READING AND INTERPRETATION

Examine macroscopically the presence or absence of visible agglutination immediately after removing the slide from the rotator. The presence of agglutination indicates a RF concentration equal or greater than 8 IU/mL (Note 1).

The titer, in the semi-quantitative method, is defined as the highest dilution showing a positive result.

#### **CALCULATIONS**

The approximate RF concentration in the patient sample is calculated as follows:

8 x RF Titer = IU/mL

#### INTERFERENCES

#### NON INTERFERING SUBSTANCES:

- Hemoglobin (10g/dl)
- Bilirubin(20mg/dl)
- Lipemia(10g/dl)

Other substances may interfere.

#### **QUALITY CONTROL**

- 1. RF Positive and Negative Control should be included in each test batch.
- 2. Acceptable performance is indicated when a uniform milky suspension with no agglutination is observed with the RF Negative Control and agglutination with large aggregates is observed with the RF Positive Control.

#### PERFORMANCE CHARACTERISTICS

#### Analytical sensitivity

8(6-16) IU/ml, under the described assay conditions.

#### **PROZONE EFFECT**

No prozone effect was detected up to 1500 IU/ml.

#### **DIAGNOSTIC SENSITIVITY**

100%.

#### **DIAGNOSTIC SPECIFICITY**

100%.

The diagnostic sensitivity and specificity have been obtained using 118 samples compared with the same method of a computer.

#### LIMITATIONS

- Reaction time is critical. If reaction time exceeds 2 minutes, drying of the reaction mixture may cause false positive result.
- Freezing the RF Latex Reagent will result in spontaneous agglutination.
- Intensity of agglutination is not necessarily indicative of relative RF concentration; therefore, screening reactions should not be graded.
- Increased levels of RF may be found in some diseases other than rheumatoid arthritis such as infectious mononucleosis, sarcodosis, lupus erythrematosus, Sjogren's syndrome.
- Certain patients with rheumatoid arthritis will not have the RF present in their serum.

- The incidence of false positive results is about 3-5 suffering from infectious %.Individuals mononucleosis, hepatitis, syphilis as well as elderly people may give positive results.
- Diagnosis should not be solely based on the results of latex method but also should be complemented with a Waaler Rose test along with the clinical examination.

#### REFERENCE VALUES

Up to 8 IU/mL. Each laboratory should establish its own reference range.

#### **NOTES**

Results obtained with a latex method do not 1. compare with those obtained with Waaler Rose test. Differences in the results between methods do not reflect differences in the ability to detect rheumatoid factors.

#### REFERENCES

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ATLAS MEDICAL William James Hous Cowley Road. Cambridge, CB4 0WX, UK. Tel: +44 (0) 1223 858 910 Fax: +44 (0) 1223 858 524

PPI008A01, Rev H (17.06.2017)

number

1 Catalogue Number REF Store at Ŵ IVD For In-Vitro Diagnostic use Caution Number of tests in the  $\bigcap_{i}$ Read product insert before Σ/ pack LOT Lot (batch) number Manufacturer Expiry date Fragile, handle with care Do not use if 昌 Manufacturer fax number package is damaged Manufacturer telephone 具



#### ATLAS SLE LATEX TEST

A latex agglutination slide test for the qualitative and semi-quantitative detection of DNP antibodies associated with Systematic Lupus Erythematosis (SLE) in human serum

**IVD** For In-Vitro diagnostic and professional use only

2°C 

Store at 2°-8°C

#### **INTENDED USE**

The SLE TEST is intended to be used as an aid in the diagnosis of Systemic Lupus Erythematosus (SLE) through the detection and quantitation of serum antinucleoprotein factors associated with SLE..

#### INTRODUCTION AND PRINCIPLE

The detection of antinuclear antibodies by laboratory methods include immunofluorescence, LE cell test and agglutination of coated particles. The antibodies that are believed to be most characteristic of SLE are those that are directed against deoxyribonucleoprotein (DNP). These antibodies are believed to cause the formation of the LE cell in vitro, with this unusual event occurring in 75-80% of those patients diagnosed as having SLE. It is not necessary to have a positive LE cell test for the diagnosis of SLE as this test had been found negative in certain individuals having symptoms suggestive for SLE. In these individuals, antinuclear antibodies may be demonstrated by methods other than the LE cell test.

The principle of the SLE TEST is based on the agglutination reaction between latex particles coated with DNP being brought into contact with a serum, which contains antinuclear antibodies. Agglutination indicates a positive reaction. The reaction time for this occurrence is within one minute.

#### **MATERIALS PROVIDED**

- SLE Latex Reagent: polystyrene latex particles coated with DNP extracted from fetal calf thymus. Sodium azide (0.1%) is used as preservative. Shake well prior to use.
- SLE Positive Control: Human serum that has been diluted and stabilized with buffers and contains sodium azide (0.1%) as a preservative.
- SLE Negative Control: Human serum that has been diluted and stabilized with buffers and contains sodium azide (0.1%) as a preservative.
- Disposable stirring sticks.
- Glass slide.

#### MATERIALS NEEDED BUT NOT PROVIDED

- Timer.
- Micropipette.
- Physiological saline (0.9%NaCl).
- Test tubes 12x75mm.
- Serological pipettes (1ml delivery).
- Lab rotator (optional).

#### **PRECAUTIONS**

- For In Vitro Diagnostic Use Only.
- Even though the control sera supplied in the SLE TEST Kit have been tested by an FDA approved method for the presence of Hepatitis B Surface Antigen (HBsAg) and HTLV-III antibodies and found to be non-reactive, all human serum products and patient specimens should be considered potentially hazardous and handled in the same manner as an infectious agent.
- The preservative sodium azide may react with metal plumbing to form explosive metal oxides.
- In disposal, flush with a large volume of water to prevent metal azide build up.

#### **STORAGE & STABILITY**

- When not in use, store reagent and controls at 2-8°C.
- DO NOT FREEZE.
- Prior to use, allow reagents and controls to warm up to room temperature.

Expiration date is specified on the kit label and on each vial. Biological indication of product instability is positive and negative controls.

#### SPECIMEN COLLECTION

- The test should be performed on serum.
- The test sera and controls should not be heat inactivated.
- Fresh specimens (less than 24 hours) should be used in performing the test.
- If testing is delayed, specimens should be refrigerated (or frozen where applicable).
- Bacterial contamination may cause false positive agglutination.

#### **PROCEDURES**

#### A. Method I (Qualitative)

- 1. Bring all reagents and serum samples to room temperature.
- 2. Positive and Negative Controls should be tested with each series of test sera. Using micropipette, place 0.040ml of test serum on one circle of the test slide. Use separate pipette tip for each test serum.
- 3. Important: The SLE Latex Reagent must be shaken vigorously for 30 seconds prior to using on each day's testing. This is to insure that there is no aggregation of the latex particles which may occur upon standing. Do not use a vortex mixer.
- 4. Deliver one drop of SLE Latex to each circle that contains specimen on the slide. Spread the resulting mixture by using the plastic stick provided. Do not use the same plastic stick to mix each test serum or control as this will cause cross-contamination.
- 5. Gently tilt and rotate slide by hand for one minute (rotator can be used).
- 6. Observe for macroscopic clumping using the indirect oblique light source. The reaction of the test serum is compared to the SLE positive and negative control sera.
- 7. Observe for agglutination no longer than one minute.

#### **MATERIALS**

\* Sera that are positive in the screening test should be retested in the titration test (semi-quantitative test) to provide verification for borderline interpretations.

#### B. Method II (Semi-Quantitative)

- 1. For each test serum to be titrated, label 6 test tubes (12x75 mm).
- 2. To each tube add 0.2 ml physiological saline.
- 3. To Tube No.1 add 0.2 ml of undiluted test serum.
- 4. Serially make two-fold dilutions by mixing contents of tube No.1 with a pipette and transferring 0.2 ml to tube No.2. Repeat serial transfers for each tube. For the 6 tubes, the dilutions range from 1:2 to 1:64. If required, additional serum dilutions can be added.
- 5. Repeat Steps 3 to 7 as given in Method I (Qualitative).

#### **RESULTS:**

#### 1. Positive Result:

Presence of agglutination within 1 minute.

#### 2. Negative Result:

Smooth milky suspension within 1 minute.

#### **LIMITATION**

Those patients with scleroderma, rheumatoid arthritis, dermatomyositis, and a variety of connective tissue diseases may show reactivity when their serum is tested with the SLE TEST latex. In recent studies, it has been reported that many widely used drugs such as hydralazine, isoniazid, procainamide and a number of anticonvulsant drugs can induce a systemic lupus erythmatosis (SLE) syndrome.

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**ATLAS Medical** 

William James House, Cowley Road, Cambridge, CB4 0WX, UK

Tel: ++44 (0) 1223 858 910 Fax: ++44 (0) 1223 858 524

PPI040A01

Rev C (24.10.2015)

REF	Catalogue Number	1	Store at
IVD	For In-Vitro Diagnostic use	<u> </u>	Caution
$\sqrt{\Sigma}$	Number of tests in the pack	[ [i	Read product insert before use
LOT	Lot (batch) number		Manufacturer
Ī	Fragile, handle with care	Ω	Expiry date
	Manufacturer fax number	<b>®</b>	Do not use if package is damaged
	Manufacturer telephone number		



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-2022-110

### **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. as our official distributor for registering, promoting, selling, distributing, taking part in tenders, maintaining & after sale technical services of under-mentioned product in the territory of Moldova:

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 to, otherwise, the risks and losses arising therefrom shall be undertaken by Sanmedico SRL

This authorization starts from Jan 1, 2022 and will be valid to December 31 2023

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.

Name: Steven Zhou

Position: Overseas Sales Director

基蛋生物科技股份有限公司 GETEIN BIOTECH, INC.

Stron There



## **Declaration of Conformity**

C

CC acc	ording to Dire	ectiv	ve 98/79/EC, on in vitro diagnostic medical devices			
Maker	Getein Biotech, Inc.					
(Name, Address)	No. 9 Bofu Road, Luhe District, Nanjing, 211505, China					
Authorized	Lotus NL B.					
(Name, Address)	Koningin Julianaplein 10, 1e Verd, 2595AA, The Hague, Netherlands.					
(Name, Address)  Authorized Representative	No. 9 Bofu R	oad V.	plein 10, 1e Verd, 2595AA, The Hague, Netherlands.  FIA8000 Quantitative Immunoassay Analyzer FIA8600 Quantitative Immunoassay Analyzer Cardiac Troponin I Fast Test Kit One Step Test for cTnI (Colloidal Gold) cTnI Rapid Test (Colloidal Gold Assay) One Step Test for NT-proBNP (Colloidal Gold) One Step Test for NT-proBNP/cTnI (Colloidal Gold) One Step Test for NT-proBNP/cTnI (Colloidal Gold) One Step Test for CK-MB/cTnI/Myo (Colloidal Gold) One Step Test for D-Dimer (Colloidal Gold) One Step Test for D-Dimer (Colloidal Gold) One Step Test for PCT (Colloidal Gold) One Step Test for β2-MG (Colloidal Gold) One Step Test for MAIb (Colloidal Gold) One Step Test for NGAL (Colloidal Gold) One Step Test for CysC (Colloidal Gold) One Step Test for HCG+β (Colloidal Gold) One Step Test for HCG+β (Colloidal Gold) One Step Test for HCG+β (Colloidal Gold) One Step Test for CK-MB/cTnI/H-FABP (Colloidal Gold) One Step Test for CK-MB/cTnI/H-FABP (Colloidal Gold) One Step Test for CK-MB/cTnI (Colloidal Gold) One Step Test for CK-MB/cTnI (Colloidal Gold) One Step Test for TSH (Colloidal Gold)			
			One Step Test for FOB (Colloidal Gold)			
			One Step Test for FOB (Colloidal Gold)			
			One Step Test for <i>H. pylori</i> (Colloidal Gold)			
			One Step Test for SAA (Colloidal Gold) Getein1100 Immunofluorescence Quantitative Analyzer			
-			Getein1600 Immunofluorescence Quantitative Analyzer			
			Getein1180 Immunofluorescence Quantitative Analyzer			
			Getein1200 Immunofluorescence Quantitative Analyzer			
			Cardiac Troponin I Fast Test Kit (Immunofluorescence Assay)			
			NT-proBNP Fast Test Kit (Immunofluorescence Assay)			
			hs-CRP+CRP Fast Test Kit (Immunofluorescence Assay) NT-proBNP/cTnI Fast Test Kit (Immunofluorescence Assay)			
			CK-MB/cTnI/Myo Fast Test Kit (Immunofluorescence Assay)			
	in -1		D-Dimer Fast Test Kit (Immunofluorescence Assay)			

PCT Fast Test Kit (Immunofluorescence Assay) β2-MG Fast Test Kit (Immunofluorescence Assay) mAlb Fast Test Kit (Immunofluorescence Assay) NGAL Fast Test Kit (Immunofluorescence Assay) CysC Fast Test Kit (Immunofluorescence Assay) CK-MB Fast Test Kit (Immunofluorescence Assay) CK-MB/cTnl Fast Test Kit (Immunofluorescence Assay) HCG+β Fast Test Kit (Immunofluorescence Assay) HbA1c Fast Test Kit (Immunofluorescence Assay) PCT/CRP Fast Test Kit (Immunofluorescence Assay) CK-MB/cTnl/H-FABP Fast Test Kit (Immunofluorescence Assay) H-FABP Fast Test Kit (Immunofluorescence Assay) 25-OH-VD Fast Test Kit (Immunofluorescence Assay) TSH Fast Test Kit (Immunofluorescence Assay) T3 Fast Test Kit (Immunofluorescence Assay) T4 Fast Test Kit (Immunofluorescence Assay 25-OH-VD Fast Test Kit (Immunofluorescence Assay) FOB Fast Test Kit (Immunofluorescence Assay) H. pylori Fast Test Kit (Immunofluorescence Assay) SAA Fast Test Kit (Immunofluorescence Assay) LH Fast Test Kit (Immunofluorescence Assay) FSH Fast Test Kit (Immunofluorescence Assay) AMH Fast Test Kit (Immunofluorescence Assay) PRL Fast Test Kit (Immunofluorescence Assay) **CK-MB Control** cTnl Control Myo Control NT-proBNP Control **D-Dimer Control CRP Control PCT Control** β2-MG Control mAlb Control NGAL Control CysC Control H-FABP Control HbA1c Control HCG+B Control CK-MB/cTnl/Myo Control CK-MB/cTnl Control NT-proBNP/cTnl Control **TSH Control** T4/T3 Control T3 Control T4 Control Others Classification of products according to directive Batch/serial No. Type, production term (if applicable)

	EN ISO 14971:2012	EN ISO 23640:2015	EN ISO 13485:2016
Applicable	EN 13612:2002	EN ISO15223-1:2012	EN ISO 18113-2:2011
coordination	EN 1041:2008	EN ISO 18113-1:2011	EN ISO 18113-3:2011
standards:	IEC 61010-1:2010	IEC 61010-2-081:2015	IEC 61010-2-101:2015
Ciarida do.	IEC 61326-1:2013	IEC 61326-2-2:2013	

Signatory representative declares herein the above mentioned device meets the basic requirements of the European Parliament and the Council's in vitro diagnostic medical devices directive: 98/79/EC Annex III. This declaration of conformity is based on European Parliament and the Council's 98/79/EC directive Annex III. The compiled technical file and quality system document according to 98/79/EC directive Annex III are testified and the quality system certificate has issued by TÜV Rheinland (Shanghai) Co., Ltd.

General Manager: Enben Su

(place and date of issue)

(name and signature or equivalent

marking of authorized person)







# Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 13485:2016

This is to certify that: Getein Biotech, Inc.

No.9 Bofu Road Luhe District Nanjing Jiangsu 211505 China 基蛋生物科技股份有限公司

中国 江苏省 南京市 六合区

沿江工业开发区 博富路9号 邮编: 211505

Holds Certificate No: MD 728432

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

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

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

For and on behalf of BSI:

**Gary E Slack, Senior Vice President - Medical Devices** 

jany C Stade

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

Page: 1 of 1

bsi.



...making excellence a habit."

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#### Cardiac Troponin I **Fast Test Kit**

**User Manual** 

Cat.# CG2001

#### INTENDED USE

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

#### SUMMARY

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

Clinical studies have demonstrated the release of cTnl into the blood stream within hours following acute myocardial infarctions (AMI) or ischemic damage. Elevated levels of 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 auidelines recommend using troponin results when making treatment decisions regarding unstable angina and non-ST segment elevation MI (NSTEMI).

#### **PRINCIPLE**

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

#### CONTENTS

#### A kit contains:

A Rit Contains.	
1. Getein cTnI test card in a sealed pouch with desiccar	١t
2	5
2. Disposable pipet ······ 2	5
3. User manual 1	
4. Standard colorimetric card ······· 1	
5. Whole blood buffer ······ 1	
A test card consists of:	

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

#### Whole blood buffer composition:

Phosphate buffered saline, proteins, detergent, preservative, stabilizer

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

#### STORAGE AND STABILITY

Store the test card at 4~30°C with a valid period of 24 months. Use the test card within 1 hour once the foil pouch is opened. Store the whole blood buffer at 0~30°C with a valid period of 24 months.

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

#### **PRECAUTIONS**

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

#### SPECIMEN COLLECTION AND PREPARATION

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

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

#### **TEST PROCEDURE**

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

#### **TEST RESULTS**

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

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

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

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

#### **EXPECTED VALUE**

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

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

#### LIMITATIONS

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

#### REFERENCES

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

#### DESCRIPTION OF SYMBOLS USED

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

	Key to symbols used					
~~	Manufacturer		Expiration date			
(2)	Do not reuse	W	Date of manufacture			
[]i	Consult instructions for use	LOT	Batch code			
1	Temperature limitation	IVD	In vitro diagnostic medical device			
Σ	Sufficient for	EC REP	Authorized representative in the European Community			
CE	CE mark	<b>®</b>	Do not use if package is damaged			

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

Version: WCG01A-DX-S-02



Getein Biotech, Inc.

Add: No.9 Bofu Road, Luhe District, Nanjing, 211505, China



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

### **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 non-exclusive authorized representative for Orient Gene Brand product in correspondence with the conditions of directive 98/79/EEC.

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 Feb.21th, 2023 to Feb.20th, 2024.

Zhejiang Orient Gene Biotech

General Manager

Date: 2023/2/21

电话 Tel:+86-572-5226111







## **Certificate**

No. Q5 092305 0001 Rev. 01

**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:** 



Design and Development, Production and Distribution Scope of Certificate:

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. 01

Report No.: SH2198802

Valid from: 2022-04-11 Valid until: 2024-03-16

Christoph Dicks 2022-04-11 Date,

Head of Certification/Notified Body





## **Certificate**

No. Q5 092305 0001 Rev. 01

**Applied Standard(s):** EN ISO 13485:2016

Medical devices - Quality management systems -

Requirements for regulatory purposes

(ISO 13485:2016) DIN EN ISO 13485:2016

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®







#### 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



## **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.:

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**HCV Hepatitis C Virus Rapid Test** 

(Serum / Plasma) (Cassette) GCHCV-302a

HCV Hepatitis C Virus Rapid Test

(Whole Blood /Serum / Plasma) (Cassette) GCHCV-402a



## 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.: 2023-IEU054#

Lot NO.: 2304046

Quantity: 1500 pcs

Expiration Date: 2025 03

CONTROLS		SPECIFICATION TEST RESULT		CONCLUSION
Negative Specimens		Negative	Negative	☑Pass □Fail
Positive Ing/ml Specimens		Positive	Positive	<b>☑</b> Pass □Fail
	2ng/ml	Positive	Positive	<b>☑</b> Pass □Fail
3ng/ml		Positive	Positive	⊠Pass □Fail
ORENT GENE Ong/ml		Positive	Positive	<b>☑</b> Pass □Fail

☑Pass: All results meet QC standard.

□Fail

OC Supervisor.

Date: 2023.04.10



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



CE-DOC-OG039 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)

H. pylori Ag Rapid Test Strip (Feces)	GCHP-601a
H. pylori Ag Rapid Test Cassette (Feces)	GCHP-602a

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: November 28, 2017

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

Tyle Py.

3818 Fuqua street Houston, TX 77047, USA Tel: +1 713 733 8088 Fax: +1 713 733 8848 Web: <u>www.Healgen.com</u>

E-mail: sales@healgen.com

HEALGEN

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

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

Date: 2022.4.22

# HBsAg Rapid Test Cassette (Whole Blood/Serum/Plasma)

#### INTENDED USE

The HBsAg Rapid Test Cassette 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 orchronic. 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 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 utilises a combination of double monoclonal antibodies to selectively detect elevated levels of HBsAg in whole blood, serum or plasma.

#### **PRINCIPLE**

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

#### **MATERIALS SUPPLIED**

- 1. Test Cassette
- 2. Desiccant
- 3. Pipette Dropper
- 4. Buffer
- 5. Package Insert

#### MATERIAL REQUIRED BUT NOT PROVIDED

- 1. Specimen collection containers
- 2.Lancets (for fingerstick whole blood only)
- 3. Centrifuge (for plasma only)
- 4.Time
- 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 device 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. electric fan or strong airconditioning.

#### SPECIMEN COLLECTION

- 1.HBsAg 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 device by using a capillary tube:
- · Touch the end of the capillary tube to the blood until filled to approximately 50 µL. Avoid air bubbles.
- $\cdot$  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.
- Add the Fingerstick Whole Blood specimen to the test device 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 device.
- · Allow 2 hanging drops of fingerstick whole blood to fall into the center of specimen well (S) on the test device, 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 device, specimen, buffer and/or controls to equilibrate to room temperature (15-30°C) prior to testing.

- 1.Remove the test device 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 device on a clean and level surface.

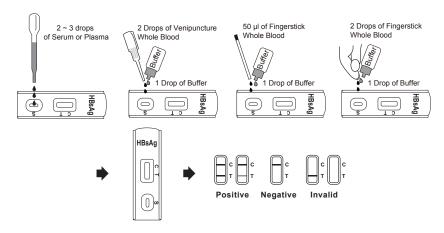
For Serum or Plasma Specimens: Hold the dropper vertically and transfer 2-3 drops of serum or plasma (approximately 60-90 µL) to the specimen well (S) of the test device. See illustration below.

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 device, 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  $\mu$  L) to fall into the center of the specimen well (S) on the test device, then add 1 drop of buffer (approximately 40  $\mu$ 

- L) 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.

# HBsAg Rapid Test Cassette (Whole Blood/Serum/Plasma)



#### INTERPRETATION OF RESULTS

(Please refer to the illustration above)

**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 HBsAg Rapid Test Cassette 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 HBsAg 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 HBsAg 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.

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

#### HBsAg Rapid Test Cassette vs. EIA test

Meth	Method		EIA		
	Results	Positive	Negative	Total Results	
HBsAg Rapid Test Cassette	Positive	345	5	350	
	Negative	2	980	982	
Total Re	esults	347	985	1332	

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

#### REFERRENCE

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

# HCV Ab Rapid Test Cassette (Whole Blood/Serum/Plasma)

#### INTENDED USE

The HCV Ab Rapid Test Cassette (Whole Blood/Serum/Plasma) is a sandwich lateral flow chromatographic immunoassay for the qualitative detection of antibodies (IgG, IgM, and IgA) anti- 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 Ab Rapid 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 Ab Rapid Test Cassette (Whole Blood/Serum/Plasma) 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 elveated levels of HCV antibodies in whole blood, serum or plasma.

#### PRINCIPLE

The HCV Ab 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 strip 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 pre-coated 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-gold conjugate regardless the presence of any antibodies to HCV. Otherwise, the test result is invalid and the specimen must be retested with another device.

#### PRODUCT CONTENTS

HCV Ab Rapid Test Cassette (Whole Blood/Serum/Plasma) containing HCV antigen coated particles and HCV antigen coated on the membrane.

#### MATERIALS SUPPLIED

1. Test Strip 2. Pipette Dropper 3.Desiccant 4.Buffer 5.Package Insert

#### MATERIAL REQUIRED BUT NOT PROVIDED

- 1.Specimen collection containers 2.Lan
- 2.Lancets (for fingerstick whole blood only)
- 3. Centrifuge (for plasma only) 4. Time
- 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 device 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 .

#### SPECIMEN COLLECTION

- 1.The HCV 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 device by using a capillary tube:
- · Touch the end of the capillary tube to the blood until filled to approximately 50 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.
- · Add the Fingerstick Whole Blood specimen to the test device 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 device.
- · Allow 2 hanging drops of fingerstick whole blood to fall into the center of specimen well (S) on the test device 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 device, specimen, buffer and/or controls to equilibrate to room temperature (15-30°C) prior to testing.

- 1.Remove the test device 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 device on a clean and level surface.

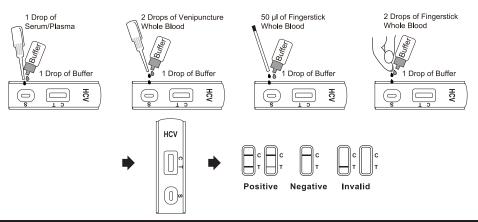
For Serum or Plasma Specimens: Hold the dropper vertically and transfer 1 drop of serum or plasma (approximately  $30~\mu L$ ) to the specimen well (S) of the test device, then add 1 drop of buffer (approximately  $40~\mu L$ ) and start the timer. See illustration below.

**For Venipuncture Whole Blood Specimens:** Hold the dropper vertically and transfer 2 drops of venipuncture whole blood (approximately 50µL) 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.

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

# HCV Ab Rapid Test Cassette (Whole Blood/Serum/Plasma)

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

(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 device. 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 Ab Rapid Test Cassette (Whole Blood/ Serum/Plasma) 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 Ab Rapid Test Cassette (Whole Blood/Serum/Plasma) 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.

#### PERFORMANCE CHARACTERISTICS

**Sensitivity:** HCV Ab Rapid Test Cassette (Whole Blood/ Serum/Plasma) has passed a seroconversion panel and compared with leading commercial HCV EIA test using clinical specimens.

**Specificity:** The recombinant antigens used for HCV Ab Rapid Test Cassette (Whole Blood/Serum/Plasma) are encoded by genes for both structural (nucleocapsid) and non-structural proteins. HCV Ab Rapid Test Cassette (Whole Blood/Serum/Plasma) is highly specific for antibodies to Hepatitis C Virus compared with a leading

commercial HCV EIA test.

The HCV Ab Rapid Test Cassette vs EIA test

Me	ethod	EIA		Total
	Results	Positive	Negative	Results
HCV Ab RapidTest	Positive	105	19	124
	Negative	2	1760	1762
Total	Results	107	1779	1886

Relative sensitivity: 98.1% Relative specificity: 98.9% Accuracy: 98.9%

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## H. pylori Ag Rapid Test Cassette (Feces)

 $C \in$ 

#### INTENDED USE

H. pylori Ag Rapid Test Cassette (Feces) is a sandwich lateral flow chromatographic immunoassay for the qualitative detection of H.Pylori antigen in feces. It is for professional *in vitro* diagnostic use only.

#### INTRODUCTION

H.Pylori is associated with a variety of gastrointestinal diseases included non-ulcer dyspepsia, duodenal and gastric ulcer and active, chronic gastritis. The prevalence of H.pylori infection could exceed 90% in patients with signs and symptoms of gastrointestinal diseases. Recent studies indicate an association of H. Pylori infection with stomach cancer. H. Pylori colonizing in the gastrointestinal system elicits specific antibody responses 4.5.6 which aids in the diagnosis of H. Pylori infection and in monitoring the prognosis of the treatment of H. Pylori related diseases. Antibiotics in combination with bismuth compounds have been shown to be effective in treating active H. Pylori infection. Successful eradication of H. pylori is associated with clinical improvement in patients with gastrointestinal diseases providing a further evidence.

#### PRINCIPLE

H. pylori Ag Rapid Test Cassette (Feces) is a lateral flow chromatographic immunoassay based on the principle of the double antibody–sandwich technique. The test cassette consists of: 1) a burgundy colored conjugate pad containing H. Pylori antibodies conjugated with color particles (H. Pylori conjugates. 2) a nitrocellulose membrane strip containing a test band (T band) and a control band (C band). The T band is pre-coated with non-conjugated H. Pylori antibodies.

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 antigen of H. Pylori if present in the specimen will bind to the H. Pylori antibodies conjugates. The immunocomplex is then captured on the membrane by the pre-coated H. Pylori antibodies, forming a burgundy colored T band, indicating a H. Pylori antigen positive test 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. Otherwise, the test result is invalid and the specimen must be retested with another device.

#### PRODUCT CONTENTS

H. pylori Ag Rapid Test Cassette (Feces) containing anti- H.pylori antibodies particles and anti-H.pylori antibodies coated on the membrane.

#### MATERIALS SUPPLIED

- 20 Sealed pouches each containing a test cassette and a desiccant
- 20 Specimen collection tubes with extraction buffer, 2.0 mL
- 1 Package insert

#### MATERIAL REQUIRED BUT NOT PROVIDED

- 1. Clock or timer
- 2. Specimen collection containers.

#### 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 is not stable out off 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. Do not use it if the tube/pouch is damaged or broken.
- 3. Test is for single use only. Do not re- use under any circumstances.
- 4. Handle all specimens as if they contain infectious agents. Observe established standard procedure for proper disposal of specimens
- 5. Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assay.
- 6. Humidity and temperature can adversely affect results

#### SPECIMEN COLLECTION

Collect sufficient quantity of feces (1-2 mL or 1-2 g) in a clean, dry specimen collection container to obtain maximum antigens (if present). Best results will be obtained if the assay is performed within 6 hours after collection. Specimen collected may be stored for 3 days at 2-8°C if not tested within 6 hours. For long term storage, specimens should be kept below -20°C.

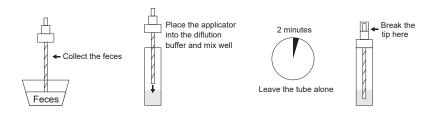
To process fecal specimens:

• For Solid Specimens:

Unscrew the cap of the specimen collection tube, then randomly stab the specimen collection applicator into the fecal specimen in at least 3 different sites to collect approximately 50 mg of feces (equivalent to 1/4 of a pea). Do not scoop the fecal specimen.

• For Liquid Specimens:

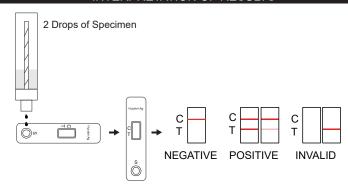
Hold the dropper vertically, aspirate fecal specimens, and then transfer 2 drops (approximately  $80~\mu L$ ) into the specimen collection tube containing the dilution buffer. Screw on and tighten the cap onto the specimen collection tube, then shake the specimen collection tube vigorously to mix the specimen and the dilution buffer. Leave the tube alone for 2 minutes.



#### TEST PROCEDURE

- 1. Remove the test device from its foil pouch by tearing along the notch and use it as soon as possible.
- 2. Specimen collection. See also specimen collection.
- 3. Holding the sample collection device upright, carefully break off the tip of collection device.
- 4. Squeeze 2 drops (~80 µL) of the sample solution in the sample well of the cassette, as in the illustration.
- 5. Read the test results in 10 minutes. It is important that the background is clear before the result is read. Do not read results after 10 minutes. To avoid confusion, discard the test device after interpreting the result.

#### INTERPRETATION OF RESULTS



## H. pylori Ag Rapid Test Cassette (Feces)

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.

#### QUALITY CONTROL

A 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 Assay Procedure and the Assay Result Interpretation must be followed closely when testing the presence of
- H. Pylori antigen in feces from individual subjects. Failure to follow the procedure may give inaccurate results.
- 2. H. pylori Ag Rapid Test Cassette (Feces) is limited to the qualitative detection of H. Pylori antigen in feces. The intensity of the test band does not have linear correlation with the antigen titer in the specimen.
- 3. A negative result for an individual subject indicates absence of detectable H. Pylori antigen. However, a negative test result does not preclude the possibility of exposure to or infection with H. Pylori.
- 4. A negative result can occur if the quantity of the H. Pylori angtigen present in the specimen is below the detection limits of the assay, or the antigen that are detected are not present during the stage of disease in which a sample is collected.
- 5. The results obtained with this test should only be interpreted in conjunction with other diagnostic procedures and clinical findings.

#### PERFORMANCE CHARACTERISTICS

A study was performed with 165 patient feces samples including both symptomatic gastrointestinal disorders and samples from non-symptomatic patients and 100 normal feces samples. Comparison for all subjects with H. pylori Ag Rapid Test Cassette (Feces) and reference ELISA kit is showed in the following table:

Me	ethod	EIA	<b>\</b>	Total Results
H.P	Results	Positive	Negative	Total Nesuits
Test Cassette	Positive	163	0	163
Casselle	Negative	2	100	102
Tota	l Results	165	100	265

Relative sensitivity: 98.8% Relative specificity: 100% Accuracy:98.9%

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#### INDEX OF SYMBOLS

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



Zhejiang Orient Gene Biotech Co.,Ltd Address: 3787#, East Yangguang Avenue, Dipu Street, Anii 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

GCHP-602a

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