














# BioCLIA<sup>®</sup> Autoimmune Control Set

## *RF IgM*

### RF IgM Assay Controls

#### Key to Symbols Used

	Catalog Number		Expiration Date
	For <i>In Vitro</i> Diagnostic Use		Lot Number
	Store between +2°C and +8°C		Consult Instruction for Use
	Manufacturer		Authorized Representative in European Union
	Control 1		Contains Sufficient for $< n >$ Tests
	Control 2		Chemical Risk Warning
			Biological Risk Warning

# BioCLIA® Autoimmune Control Set,

## RF IgM

### Intended Use

The BioCLIA Autoimmune Control Set, RF IgM is intended for the quality control purposes of the BioCLIA RF IgM performed on the BioCLIA® 1200 and BioCLIA® 6500.

### Catalog Numbers

MY00334 (2 X 1 mL)

MY00385 (4 X 1 mL)

### Summary and Principles of the Procedure

Rheumatoid factors (RFs) are anti-antibodies specific to the degenerated IgG antibodies caused by infection factors (bacteria, viruses, etc.). B cell clones for expressing RFs exist in rheumatoid arthritis (RA) patients and about 50% of healthy human bodies. A large amount of RFs produced under certain pathologic conditions such as degenerated IgG or EB virus directly stimulating the B cells. <sup>1</sup> Commonly, RFs include IgA, IgD, IgE, IgG and IgM types. <sup>2,3</sup>

The presence of RFs in serum can indicate the occurrence of suspected autoimmune activity unrelated to rheumatoid arthritis, such as that associated with tissue or organ rejection. In such instances, RF may serve as one of several serological markers for autoimmunity. <sup>4</sup> The sensitivity of RFs for established rheumatoid arthritis is only 60-70% with a specificity of 78%. <sup>5</sup> RFs positive patients are likely to have extra-articular manifestation that includes subcutaneous nodules and vasculitis. Patients with a high concentration of RFs suffer from diseases like rheumatoid arthritis (RA, 50-90%), Sjogren's syndrome (75-95%). <sup>6</sup> In addition, it was also found that RFs are related to systemic lupus erythematosus (SLE, 15-35%), polymyositis (55-10%), systemic sclerosis (20-30%), mixed connective tissue disease (MCTD, 50-60%) or cryoglobulinemia (40-100%). <sup>7,8</sup> Specifically, RF-IgM has no close relationship with RA activity.

### Materials supplied

- **RF IgM Control 1** A tube contains 1 mL, ready to use reagent. Control 1 contains anti-RF IgM antibodies in MOPS (PH6.0-7.0) buffer (Low).

RF-M Control L

Preservatives: 5-Bromo-5-Nitro-1, 3-Dioxane (BND) < 1%.

- **RF IgM Control 2** A tube contains 1 mL, ready to use reagent. Control 2 contains anti-RF IgM antibodies in MOPS (PH6.0-7.0) buffer (High).

RF-M Control H

Preservatives: 5-Bromo-5-Nitro-1, 3-Dioxane (BND) < 1%.

Target value and acceptable range for the controls are indicated on control information sheet in each kit.

### Warnings and Precautions

The human derived material in this product was tested by FDA approved methods and found nonreactive for Hepatitis B Surface Antigen (HBsAg), Anti-HCV and HIV 1/2 antibodies. Handle as if potentially infectious. 9 Avoid contacting with skin and eyes. Do not empty into drains. Wear suitable protective clothing.

Precautions:



Human serum is added in the controls.

- The product is for *in vitro* diagnostic use only.
- Do not use any controls beyond their expiration dates. Do not mix controls from different lots unless specified.
- Instructions must be carefully followed for using and storing of controls. Any modification in procedure may interfere with the results. Controls and contaminated vials must be handled strictly following safety guidelines or rules of biological hazards to ensure the users' and environmental safety.
- Controls contain chemical and biological components. Avoid ingesting or splashing onto skin and mucous membrane. If direct contact with controls happens, rinse the contact surface with plenty of water immediately and see a doctor if necessary.

### Storage Conditions

The kit is stable until the expiration date, if it is stored and handled as directed. Routine store the kit in refrigerator (2-8°C). Once a control tube is opened, it is good for a total of 15 times, no more than 2 hours per time when kept uncapped, onboard the instrument, after which the reagent must be discarded. Three freeze-thaw cycles before testing has no effect on the kit reagents.

### Assay Procedure

Note that, for obtaining optimal performance, it is important to perform all routine maintenance procedures as defined in the BioCLIA® 1200 and BioCLIA® 6500 User Manual.

See the BioCLIA® 1200 and BioCLIA® 6500 User Manual for preparation, setup, dilutions, adjustment, assay and quality control procedures.

The control procedure can be done before running the specimens each day. Users also can adjust the control procedure period according to their own lab frequency.

### Limitations

This product is designed as controls for monitoring the performance of the BioCLIA RF IgM. These controls are subjected to the limitations of the assay system. Deviations may indicate problems with one or more components in the test system.

### References

1. Edkins A, Cushley W. The Jekyll and Hyde nature of antibodies.

Biological Sciences Review 2012;25:2.

2. Banchuin N, Janyapoon K, Sarntivijai S, Parivisutt L. Re-evaluation of ELISA and latex agglutination test for rheumatoid factor detection in the diagnosis of rheumatoid arthritis. Asian Pacific Journal of Allergy & Immunology 1992;10:47-54.
3. Herrmann D, Jäger L, Hein G, Henzgen M, Schlenvoigt G. IgE rheumatoid factor. Occurrence and diagnostic importance in comparison with IgM rheumatoid factor and circulating immune complexes. Journal of Investigational Allergology & Clinical Immunology 1991;1:302-7.
4. Rostaing L, Modesto A, Cisterne JM, Izopet J, Oksman F, Duffaut M, et al. Serological markers of autoimmunity in renal transplant patients with chronic hepatitis C. American Journal of Nephrology 1998;18:50-6.
5. Nishimura K, Sugiyama D, Kogata Y, Tsuji G, Nakazawa T, Kawano S, et al. Meta-analysis: diagnostic accuracy of anti-cyclic citrullinated peptide antibody and rheumatoid factor for rheumatoid arthritis. Annals of Internal Medicine 2007;146:797-808.
6. Visser H. Early diagnosis of rheumatoid arthritis. Best Practice & Research Clinical Rheumatology 2005;19:55-72.
7. Wilson D. Rheumatoid factors in patients with rheumatoid arthritis. Canadian Family Physician Médecin De Famille Canadien 2006;52:180-1.
8. Longmore M, Wilkinson IB, Rajagopalan SR. Oxford Handbook of Clinical Medicine. 2004 ;6th ed.
9. Richmond JY, Mckinney RW. Biosafety in microbiological and biomedical laboratories: U.S.GPO. 1999.



HOB Biotech Group Co., Ltd

C6 Building, No. 218 Xinghu Road, Suzhou Industrial Park,

Suzhou, Jiangsu, 215123, China

**REGISTRANT/MANUFACTURE:** HOB Biotech Group Co., Ltd

**ADDRESS/LOCATION:**

C6 Building, No. 218 Xinghu Road, Suzhou Industrial Park, Suzhou, Jiangsu, 215123 China

**CONTACT INFORMATION:** TEL (+86)512-69561996  
Fax (+86)512-62956652

**WEBSITE:** [www.hob-biotech.com](http://www.hob-biotech.com)

**CUSTOMER SERVICE:** HOB Biotech Group Co., Ltd

**CUSTOMER SERVICE CONTACT:** TEL (+86)4008601202



**EUROPE REPRESENTATIVE:** Emergo Europe

**ADDRESS/LOCATION:**

Prinsessegracht 20, 2514 AP The Hague, The Netherlands

**Technical Assistance**

For technical assistance, contact your National Distributor.

17<sup>th</sup> April 2019

Revision 9