

## BioCLIA Autoimmune Control Set, dsDNA

Control	P
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Cat.No.	Kit Size
MY00301	2 X 1 mL
MY00352	4 X 1 mL

### INTENDED USE

The BioCLIA Autoimmune Control Set, dsDNA is intended for the quality control purposes of the BioCLIA dsDNA performed on the BioCLIA 6500 and BioCLIA 500. For professional *in vitro* diagnostic use only.

### SUMMARY AND EXPLANATION

Anti-nuclear antibody (ANA) is a class of auto-antibodies with different binding affinities specific to different nuclear antigens. Generally, ANAs include extractable nuclear antigen (ENA) antibodies and un-extractable nuclear antigen antibodies. 1 Determination of ANA has significant correlation to the diagnosis of Sharp syndrome (MCTD), SLE, sjogren's syndrome, progressive systemic sclerosis, polymyositis/dermatomyositis, overlap syndrome, and limited types of progressive systemic sclerosis (CREST syndrome).

Anti-DNA antibody can be divided into two types: anti-double-stranded DNA (dsDNA) antibodies and anti-denatured single-stranded DNA (ssDNA) antibodies. Anti-dsDNA antibody can bind to the double helix of DNA skeleton while ssDNA antibody only interacts with purine or pyrimidine base polymers.<sup>2, 3</sup> Anti-dsDNA antibodies are recognized as the major serologic marker of SLE. Their specificity and their sensitivity give them a high diagnostic value. Therefore, they are a part of the clinical and biological criteria established in 1982 by the American Rheumatism Association (ARA) for the diagnosis of the SLE.

The detection of anti-dsDNA antibodies is particularly useful in two different ways: as an aid to the diagnosis of SLE and as a tool to monitor the course of the disease. For the second purpose repeated serum sampling of individual patients can be very informative about the clinical course of the disease because a clear-cut relationship exists between anti-DNA and diseases activity: flares of SLE are generally preceded by a rise in anti-dsDNA levels, followed by a steep drop during the exacerbation (particularly in nephritis). Furthermore, different treatments of patients have varying influences on anti-dsDNA levels and can be adapted by a regular follow-up of these antibodies.

### MATERIALS SUPPLIED

- **dsDNA Control N** Barcode labeled tubes with buffer containing human antibodies to dsDNA in stabilizers and preservatives. Ready to use, 1 mL.

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Preservatives: 0.0015% < Proclin 300 < 0.6%.

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Preservatives: 0.0015% < Proclin 300 < 0.6%.

The Control Code contains controls' information is provided in each kit.

Target value and acceptance range for the controls are indicated on the card provided in each kit.

### WARNINGS AND PRECAUTIONS

- For professional *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.
- Any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority of the Member State in which the user and/or the patient is established!

### Precautions:



Human serum is added in the controls.

- 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. 7 Avoid contacting with skin and eyes. Do not empty into drains. Wear suitable protective clothing.



- Proclin 300 is added in the controls at concentration between 0.0015% - 0.6%.
- 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

- Store the kit at 2-8 °C.
- The shelf life of the unopened kit is 12 months from day of production.
- Vial opened controls could be used for 28 successive days,

exposure no more than 2 hours each time when kept uncapped and is good for up to 35 controls, after which the reagent must be discarded.

- Avoid repeated freezing and thawing.

### ASSAY PROCEDURE

Detailed information about operating the BioCLIA instruments can be taken from the Instrument User's Manual.

Note that, it is important to perform all routine maintenance procedures for optimal performance.

#### Control

The control procedure should be done before running the specimens each day. Users also can adjust the control procedure period according to their own lab frequency. Each Laboratory should establish its own reference ranges.

#### Programming and Running samples

1. Put the kit into the corresponding position of the reagent chamber of the fully automatic chemiluminescence analyzer. The information of the kit can be uploaded into the instrument system through the scanning of reagent barcode, and can also be set through the supporting software of the instrument.
2. The information of calibrator / quality control is identified by scanning the calibrator / control barcodes, and the position of calibrator / quality control is assigned in the instrument system.
3. The sample to be tested is placed on the instrument sample rack chamber, and the corresponding test information is edited through the instrument supporting software.
4. Start the operation procedure, and all calibrator / quality control / sample processing steps will be automatically executed.

#### TRACEABILITY

The reported values were determined over multiple runs on the BioCLIA 6500 and BioCLIA 500 using specific lots of reagents against an in-house standard. DGP IgA results are reported in RU/mL which is interpreted from relative light unit (RLU). Method comparison test showed good sensitivity and specificity of tested assay.

#### LIMITATIONS

- The controls are designed for control of the same lot of BioCLIA Autoimmune Reagent Kit.
- The controls can be kept uncapped onboard the instrument up to 2 hours for each time of usage. And a total up to 35 controls are suggested, for any longer period of time, the reagent should be discarded, otherwise may result in improper results.

#### SYMBOLS

Control N	Negative Control
Control P	Positive Control

REF	Catalog Number		Use-by date
IVD	In Vitro diagnostic medical device	LOT	Lot Number
	Store between +2°C and +8°C		Consult Instruction for Use
	Manufacturer	EC REP	Authorized Representative in the European Community
CE	CE Marking		Contains Sufficient for <n> Tests
	Biological Risk		GHS07 Warning

#### REFERENCE

1. Casals SP, Friou GJ, Myers LL. Significance of antibody to DNA in systemic lupus erythematosus. *Arthritis & Rheumatism* 1964;7:379-90.
2. Tan EM, Cohen AS, Fries JF, Masi AT, Mcshane DJ, Rothfield NF, et al. The 1982 revised criteria for the classification of systemic lupus erythematosus. *Arthritis & Rheumatism* 1982;25:1271-77.
3. Arana R, Seligmann M. Antibodies to native and denatured deoxyribonucleic acid in systemic lupus erythematosus. *Journal of Clinical Investigation* 1967;46:1867.
4. Gonzalez EN, Rothfield NF. Immunoglobulin class and pattern of nuclear fluorescence in systemic lupus erythematosus. *New England Journal of Medicine* 1966;274:1333-38.
5. US Department of Health and Human Services. *Biosafety in Microbiological and Biomedical Laboratories*, Fourth Edition. Washington, DC: US Government Printing Office May 1999.



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The eIFU is available on Website:

<http://en.hob-biotech.com/usercenter/login.aspx>

#### TECHNICAL ASSISTANCE

For technical assistance, contact your National Distributor.

Date of issue: 17<sup>th</sup> March 2019

Date of revision: 20<sup>th</sup> December 2021

Change Control Number: CN21129E

Version: A/1 (EN)