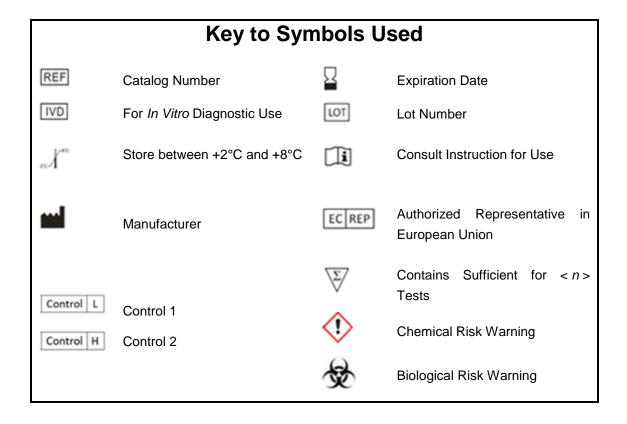
# **BioCLIA<sup>®</sup> Autoimmune Control Set**

## **ScI-70**

## **ScI-70 Assay Controls**



## BioCLIA® Autoimmune Control Set,

## ScI-70

#### **Intended Use**

The BioCLIA Autoimmune Control Set, Scl-70 is intended for the quality control purposes of the BioCLIA Scl-70 performed on the BioCLIA®BioCLIA®1200 and BioCLIA®6500.

#### **Catalog Numbers**

MY00307 (2 X 1 mL) MY00358 (4 X 1 mL)

#### **Summary and Principles of the Procedure**

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 antibodie. 

Determination of ANA has significant correlation to the diagnosis of Sharp syndrome (MCTD), systemic lupus erythematosus (SLE), sjogren's syndrome, progressive systemic sclerosis, polymyositis/dermatomyositis, overlap syndrome, and limited types of progressive systemic sclerosis (CREST syndrome).

Scl-70 antigen is a kind of DNA topoisomerase I. It is with the molecular weight of 100 kDa for natural type and most of them are hydrolyzed to form 70 kDa protein. DNA topoisomerase I exists in nucleoplasm and with a high concentration in nucleolus, participating in partially spiral release effect in DNA replication and transcription.

Anti-Scl-70 antibodies are specific markers of scleroderma patients (specificity of 98-100%). <sup>2</sup> Anti-Scl-70 antibodies are associated with diffuse skin lesion and pulmonary fibrosis. The sensitivity of the antibodies for scleroderma is approximately 34%, but is higher for cases with diffuse cutaneous involvement (40%), and lower for limited cutaneous involvement (10%). The specificity of the antibodies is 98% and 99.6% in other rheumatic diseases and normal individuals, respectively. <sup>3, 4</sup> In addition to scleroderma, these antibodies are found in approximately 5% of individuals with SLE. <sup>5</sup> The antigenic target of anti-Scl-70 antibodies is topoisomerase I. <sup>6</sup>

## Materials supplied

• Scl-70 Control 1 A tube contains 1mL, ready to use reagent. Control contains human antibodies to Scl-70 in stabilizers and preservatives (low). Scl-70 Control L

Preservatives: 0.0015% < Proclin 300 < 0.6%.

• Scl-70 Control 2 A tube contains 1mL, ready to use reagent. Control contains human antibodies to Scl-70 in stabilizers and preservatives (high). Scl-70 Control | H

Preservatives: 0.0015% < Proclin 300 < 0.6%.

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. <sup>7</sup> Avoid contacting with skin and eyes. Do not empty into drains. Wear suitable protective clothing.

Precautions:



Human serum is added in the controls.



Proclin 300 is added in the controls at

concentration between 0.0015% - 0.6%.

- 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®BioCLIA®1200 and BioCLIA®6500 User Manual.

See the BioCLIA®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 ScI-70. These controls are subjected to the limitations of the assay system. Deviations may indicate possible problems with one or more components in the test system.

#### References

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- 3 Kavanaugh A, Tomar R, Reveille J, Solomon DH, Homburger HA. Guidelines for clinical use of the antinuclear antibody test and tests for specific autoantibodies to nuclear antigens. Archives of pathology & laboratory medicine 2000;124:71-81.
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- 5. Mahler M, Silverman ED, Schulte-Pelkum J, Fritzler MJ. Anti-Scl-70 (topo-I) antibodies in SLE: myth or reality? Autoimmunity reviews 2010;9:756-60.
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- 7. Richmond JY, Mckinney RW. Biosafety in microbiological and biomedical laboratories: U.S.GPO.1999.







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#### **Technical Assistance**

For technical assistance, contact your National Distributor.

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