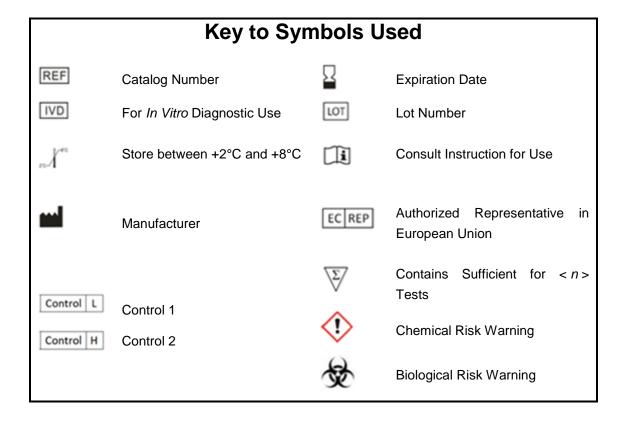
# **BioCLIA<sup>®</sup> Autoimmune Control Set**

# Cardiolipin IgG

### **Cardiolipin IgG Assay Controls**



## BioCLIA® Autoimmune Control Set, Cardiolipin IgG

#### **Intended Use**

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

#### **Catalog Numbers**

MY00325 (2 X 1 mL) MY00376 (4 X 1 mL)

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

Antibodies against cardiolipin belong to the group of anti-phospholipid antibodies specific for negatively charged phospholipids, components of biological membranes.  $^{1,\ 2}$ . Anti-phospholipid antibodies are frequently found in sera of patients with systemic lupus erythematosus (SLE) and related diseases. These specific anti-cardiolipin antibodies recognize epitopes on a complex composed of cardiolipin and  $\beta 2$ -glycoproptein I which are only expressed when  $\beta 2$ -glycoprotein I interacts with cardiolipin $^4$ . The prevalence of anti-cardiolipin antibodies (aCL) in SLE is 50% and 5-40% in patients with systemic autoimmune disease like rheumatoid arthritis (RA), scleroderma, sjogren's syndrome or sharp syndrome.  $^{5,6}$ 

The occurrence of anti-cardiolipin antibodies in patients with SLE and related diseases is typical of a secondary anti-phospholipid syndrome (APS). In contrast, anti-cardiolipin antibodies in patients with no other autoimmune diseases characterize the primary anti-phospholipid syndrome (APS). Many studies have shown a correlation between these autoantibodies and an enhanced incidence of thrombosis, thrombocytopenia and recurrent fetal loss. 80% of aCL positive patients develop venous or arterial thrombosis. Heart or brain infarction patients are often detected certain concentrations of aCL, indicating an increased risk of other vascular complications where patients' conditions and prognosis have to be monitored. On spontaneous stillbirth, miscarriage or premature birth, aCL can be found positive even for women without any autoimmune disease symptoms. 5, 6,7

Many immunoglobulin isotypes against aCL can be found including aCL-IgA, aCL-IgG and aCL-IgM. Level of aCL-IgG is highly correlated with thrombocytopenia, thrombosis or abortion; aCL-IgM is relevant to haemolytic anaemia; while aCL-IgA seems less linked to autoimmune diseases <sup>8</sup>.

#### **Materials supplied**

• Cardiolipin IgG Control 1 A tube contains 1mL, ready to use reagent. Control 1 contains

anti-aCL IgG antibodies in <u>stabilizers</u> and preservatives (Low).

Preservatives: 0.0015% < Proclin 300 < 0.6%.

• Cardiolipin IgG Control 2 A tube contains 1mL, ready to use reagent. Control 2 contains anti-aCL IgG antibodies in stabilizers and preservatives (High).

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>9</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® 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 Cardiolipin IgG. 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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- 9. 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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