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# **Anti-Ovary Antibody Test System**

### **OUALITY CONTROL**

- Positive and negative serum controls must be included in each day's testing to confirm reproducibility, sensitivity and specificity of the test procedure.
- The negative serum control should result in little (+) or no fluorescence. If this control shows bright fluorescence, either the control, antigen, conjugate or technique may be at fault.
- The positive serum controls should result in bright 3+ to 4+ fluorescence. If these controls show little or no fluorescence, either the control, antigen, conjugate or technique may be at fault.
- In addition to positive and negative serum controls, a PBS control should be run to establish that the conjugate is free from non-specific staining of the antigen substrate. If the antigen shows bright fluorescence in the PBS control repeat using fresh conjugate. If the antigen still fluoresces, either the conjugate or antigen may be at fault.

### RESULTS

A positive result is observed as a bright 1-4+ staining. This antibody is associated with Ovarian dysfunction and may be significant in the patient profile as well as aid in diagnosis and prognosis.

#### TEST LIMITATIONS

Issue Date: 21/01/2020

1. No diagnosis should be based on a single serologic test since various host factors must be taken into consideration.

### LITERATURE REFERENCES

- Coulam, C.B. Prevalence of circulating antibodies directed toward ovaries among women with premature failure. Am J Reprod Immunol Microbiol 1985; 9: 23-4.
- Mignot, M.H. et al. Premature ovarian failure. I. the association with autoimmunity. Eur J Ostet Gynecol Reprod Biol 1989; 30:59-66.
- Gober, B. et al. Ovary antibodies after IVF, Lancet 1990; 335; 723.
- Coulam, C.B. The prevalence of autoimmune disorders among patients with primary ovarian failure. Am J Reprod Immunol Microbiol 1983; 4: 63-6.



### INSTRUCTIONS FOR USE

# **Anti-Ovary Antibody Test System**

**K4816** - 48 Tests **K5016** - 50 tests **K9616** - 96 Tests

**S5213** - 5 well

S0213 - 10 well

**S4213** - 4 well S8213 - 8 well Also for: Monkey ovary slides

## INTENDED USE

The Bio-Diagnostics Anti-Ovary Antibody Test kit is an immunofluorescent antibody (IFA) test to detect the presence of antibodies directed against various structures of the ovary and the ovule, in human serum.

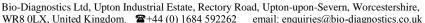
### SUMARY AND EXPLANATION

Ovarian antibodies are found in patients with premature ovarian failure. These patients have an increased frequency of autoimmune diseases; organ and non-organ specific, thyroid being the most common. Women undergoing in-vitro fertilisation (IVF) can produce IgG, IgM and IgA antibodies to the theca interna and atretic follicles. Antibodies to the corpora lutea are found in patients with primary sterility and endometriosis.

### PRINCIPLE OF THE TEST

The primary test reaction involves circulating anti-ovary antibodies present in the patient's serum, which attach to their homologous antigens. This occurs during the incubation period whilst the serum covers the antigen surface. A secondary reaction then follows a rinsing period that removes the unbound human antibody. The reagent used in the secondary reaction is a fluorescein labelled antihuman globulin conjugate. The antigen surface is then thoroughly rinsed free of unbound conjugate and viewed under an appropriate fluorescent microscope.







# **Anti-Ovary Antibody Test System**

### WARNINGS AND PRECAUTIONS

- 1. All human components have been tested by radioimmunoassay for (HBsAg) and HTLVIII/LAV by an FDA approved method and found to be negative (not repeatedly reactive). However, this does not assure the absence of (HBsAg) or HTLVIII/LAV. All human components should be handled with appropriate care.
- The controls included in the kit contain 0.1% sodium azide or 0.01% thiomersal as preservatives. Although these are at a low concentration, these reagents should be considered toxic. They should not be ingested or allowed to come into contact with either the skin or the mucous membranes. Sodium azide may also cause the formation of potentially explosive lead or copper azides in sinks.
- Do not use components beyond their expiration date.
- Follow the procedural instructions exactly as they appear in this insert to ensure valid results.
- For in vitro diagnostic use.
- Handle slides by the edges since direct pressure on the antigen wells may damage the antigen.
- Once the procedure has started do not allow the antigen in the wells to dry out. This may result in false negative test results, or unnecessary artefacts.

# KIT CONTENTS

SLIDE Monkey ovary substrate antigen slides (S4213, S5213, S8213, S0213) CONJ IgG FITC Conjugate (for use with Primate substrates) with Evans Blue Counterstain: J502. This reagent contains antibodies that will react with the human IgG (H+L) Immunoglobulin class. CONTROL + Ovary (theca cells) antibody Positive Control no: C030N/C030N-0.5 CONTROL -Universal Negative Control no: C000N/C000N-0.5 IFA/DFA PBS Buffer Pack no: R002 MM Mounting Medium no: R005

Also available are 5 and 10 well Monkey ovary slides (S5213 / S0213).

Note: All kit components are available separately. Please see the Bio-Diagnostics Ltd catalogue for more details.

### ADDITIONAL MATERIALS REQUIRED BUT NOT PROVIDED

Disposable pipettes Test tubes and rack or microtitre system Staining Dish and Slide Forceps Moisture Chamber Volumetric Flask (500 ml) Distilled Water Fluorescence Microscope

Paper Towels – lint free

### REAGENT PREPARATION

1. Buffer Pack no: R002. Rehydrate buffer with 1 litre of sterile distilled water.

### KEY FOR OTHER SYMBOLS

Used in this instruction leaflet and on accompanying product packaging:

Manufacturer Contains sufficient for <n> tests **RFU** Ready for use **IVD** In vitro diagnostic medical device Temperature limitation

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# **Anti-Ovary Antibody Test System**

### STORAGE AND STABILITY

The IFA Test System components (except PBS) must be stored at a temperature of +2°C to +8°C. Do not freeze the test kit. The stability of the kit is as indicated by the expiry date on the packaging under the above storage conditions. This applies to unopened and opened reagents.

Phosphate Buffered Saline is stable at room temperature storage. The reconstituted Buffer does not contain preservatives and should be stored at 2-8°C. Care should be taken to avoid contamination.

### SPECIMEN COLLECTION

Serological specimens should be collected under aseptic conditions. Haemolysis is avoided through prompt separation of the serum from the clot. Serum should be stored at 2-8°C if it is to be analysed within a few days. Serum may be held for 3 to 6 months by storage at -20°C or lower. Lipaemic and strongly haemolytic serum should be avoided. When specimens are shipped at ambient temperatures, addition of a preservative such as 0.01% thiomersal or 0.1% sodium azide is strongly recommended.

### TEST INSTRUCTIONS

Screening: dilute test serums 1/4 (1 part patient sample to 3 parts diluent) in PBS. N.B. Although this dilution factor is suggested, each laboratory should determine their individual screening dilution.

**Titration**: set up doubling dilutions of serum starting at 1/4. (i.e. 1/4, 1/8, 1/16, 1/32, etc.).

- 1. Once slides reach room temperature tear slide envelope at notch. Carefully remove the slide and avoid touching the antigen areas. The slide is now ready to use.
- Place a drop of diluted serum (20 to 30µl) and controls over the antigen wells.
- Place slide with patient's serum and controls in a moist chamber for 30 minutes at room temperature (approximately 18-24°C).
- Remove slide from moisture chamber and tap the slide on its side to allow the serum to run off onto a piece of paper towel. Using a wash bottle, gently rinse remaining sera from slide being careful not to aim the rinse stream directly onto the well.
- Wash in PBS for 5 minutes. Repeat using fresh PBS.
- Place a blotter on the lab table with absorbent side up. Remove slide from PBS and invert so that tissue side faces absorbent side of blotter. Line up the wells to blotter holes. Place slide on top of the blotter. Wipe the back of the slide with dry lint free paper towel. Apply sufficient pressure to slide while wiping to absorb buffer. Do not allow tissue to dry.
- 7. Deliver 1 drop (20-30µl) of conjugate per antigen well. Repeat steps 3-6.
- Place 4-5 drops of mounting medium on slide.
- Apply a 22 x 70 mm coverslip. Examine the slide under a fluorescent microscope.

Note: To maintain fluorescence, store mounted slide in a moisture chamber placed in a dark refrigerator.

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