# SCOPESCREEN

## Sperm Antibody A/G Serum Controls

## **Description:**

**Sperm Antibody Positive A/G Serum**: 1 ml heat-inactivated human serum containing antibodies of the IgA and IgG classes that bind to human sperm, with 0.1% sodium azide. Ready to use.

**Sperm Antibody Negative Serum**: 1 ml heat-inactivated human serum containing no antibodies that bind to human sperm, with 0.1% sodium azide. Ready to use.

Note: These serum controls may look cloudy due to lipemia. Lipemic serum will not interfere with test results.

## Uses:

These products are suitable for use as controls in sperm antibody assays such as ImmunoSpheres®, MarScreen® IgG and MarScreen® IgA.

<u>Direct sperm antibody assays (on sperm)</u>: Because of the impracticality of using specimens of antibody-positive sperm as a positive control in direct sperm antibody tests, use serum controls instead. To prepare antibody-positive sperm, start with sperm known to be negative for antibodies. Wash sperm free of seminal plasma. Then incubate the washed sperm with **Sperm Antibody Positive A/G Serum** at a final dilution of 1:10, as in the protocol for the indirect ImmunoSpheres®. Wash the sperm free of **Sperm Antibody Positive A/G Serum** and then use the prepared sperm as a positive control for antibody-positive sperm.

As an additional control, always prepare antibody-negative sperm at the same time using the **Sperm Antibody Negative Serum**. To do this, incubate the washed sperm with **Sperm Antibody Negative Serum** at a final dilution of 1:10. Wash the sperm free of **Sperm Antibody Negative Serum** and then use the prepared sperm as a negative control for antibody-negative sperm exposed to serum.

<u>Indirect sperm antibody assays (in serum)</u>: Follow the manufacturer's directions for testing serum.

## **Specifications:**

A 1/10 final dilution of the **Sperm Antibody Positive A/G Serum** will give a greater than 90% total binding of Anti-IgG beads and about 20% total binding of Anti-IgA beads in the indirect ImmunoSpheres® when incubated for one hour at 37°C using donor sperm. A 1/100 dilution gives a negative result.

A 1/10 final dilution of the **Sperm Antibody Negative Serum** has no detectable immunoglobulins that will bind to sperm.

#### **Recommendations:**

The researcher should determine the optimal working dilution(s) of these products. The following information is provided as a guideline to the researcher:

<u>MarScreen</u>\*: Dilute serum 1:16 before using in the Indirect MarScreen\* IgG or the Indirect MarScreen\* IgA. For example, add 20  $\mu$ I serum to 300  $\mu$ I sperm washing medium.

ImmunoSpheres®: Use serum at a final dilution of 1:10 in either indirect Anti-IgG or indirect Anti-IgA test. For example, add 50 μl serum to 400 μl sperm washing medium and 50 μl washed sperm (~50 million motile sperm/ml) suspension. The researcher should establish the % total binding of the **Sperm Antibody Positive A/G Serum** when it is used in either indirect Anti-IgA test.

## Caution:

The Sperm Antibody Positive A/G Serum and the Sperm Antibody Negative Serum have been tested and found negative for HIV antibody and hepatitis B surface antigen, but negative results do not guarantee absence of virus.

## Storage:

Store the reagents at  $2^{\circ}$ C to  $8^{\circ}$ C. They can be used until the expiration date on each label. The expiration date is 18 months from the date of manufacture.

Do not freeze.

Scopescreen Inc. +1 212-260-6692

info@scopescreen.com www.scopescreen.com 6/28/17 Revised 11/26/2020

(Formerly known as BIOSCREEN)