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# Sperm Antibody A/G Serum Controls

FOR RESEARCH USE ONLY

#### **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<sup>®</sup>, IBT<sup>™</sup>, MarScreen<sup>®</sup> IgG, and others. They cannot be used in an indirect MarScreen<sup>®</sup> IgA, an indirect MarScreen<sup>®</sup> IgM, or with an indirect ImmunoSpheres<sup>®</sup> Anti-IgM or an indirect IBT<sup>™</sup> Anti-IgM.

Direct sperm antibody assays (on sperm): 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® or IBT<sup>™</sup>. 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.

Indirect sperm antibody assays (in serum): 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 IBT<sup>TM</sup> 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:

MarScreen<sup>®</sup>: Dilute serum 1:16 before using in the Indirect MarScreen<sup>®</sup> IgG. For example, add 20 μl serum to 300 μl sperm washing medium.

ImmunoSpheres<sup>®</sup> or IBT<sup>™</sup>: 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°C to 8°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.

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