Pregnancy Test

INDICATIONS
For pregnancy diagnosis in livestock.

TEST
1.5 mL of urine per test. Colorimetric.

NOTICE
P-TEST is an on-farm bio-analytical test for pregnancy in livestock species. Federal law (US) does not require that this product be used by or on the order of a licensed veterinarian. Please consult local regulations.

DESCRIPTION
P-TEST is a simple and quick colorimetric assay for monitoring pregnancy using a urine sample. Packaged in kit form, each test is sealed in a vial to maintain potency during storage. The test is run by adding urine directly into the P-TEST vial. At 1 and 10 minutes, the results can be visually read.

MODE OF ACTION
The P-TEST works by rapid analysis of the pregnancy hormone, estrone sulfate in urine using a simple colorimetric reaction. Pregnancy can be monitored in the 2nd and 3rd trimesters after breeding without palpation or ultrasound. The accuracy in predicting pregnancy is 97.4%. The accuracy of predicting non-pregnancy is 94.4%. The sensitivity of this test is >95%. Please refer to TABLE 1 for use in specific animal species.

CONTRAINDICATIONS
- When collection urine, do not use in animals which are known to be infected with or are carriers of Leptospirosis. Consult your veterinarian.
- When handling urine, be sure to protect yourself by wearing rubber/latex gloves.
- Do not expose open cuts or wounds to blood or urine.

COLLECTION OF URINE
The following methods of urine collection can be used. Run the assay immediately after collection. (Hint: Urine collected in early morning is more accurate).

1. Manual stimulation. Ensure sufficient restraint to prevent the beast from moving away during the procedure. Gently massage the skin under the vulva (escutcheon) in an upward motion. In most cases this will result in urine flow in one minute. Collect several milliliters of urine. Use a clean, dry, urine cup (or similar receptacle) as a sampling container. Try to collect urine mid-stream. Use a clean technique to minimize exposure to feces, dust, and insects.
2. Catheterization of the bladder. For more advanced technicians, the following method can be employed. Ensure that the beast is restrained in a crush or bail or head-catching to minimize movement during the procedure. Use either a Nielsen catheter or an AI sheath. Ensure that all equipment is suitably sterilized. Clean the vulva and perineal area with water and disinfectant. After donning and lubricating a glove, locate the opening of the urethra on the ventral floor of the vagina, approximately 30mm (1 inch) anterior to the vulva opening. Use an index finger to open the urethral opening and direct the catheterer. Gently insert the catheter. In a mature animal the catheter may be passed up to 200mm (8 1/2 inches) before urine will flow.
3. Casual collection. Most animals urinate 4-6 times per day. Knowledge of urination habits can be helpful. Collect urine directly into a clean container and seal. A clean, small jar with a lid works well.

Please see the following YouTube video link for urine collection demonstration in cattle: https://www.youtube.com/watch?v=IJ__WnhbWn0

TABLE 1: Use of P-TEST by species

<table>
<thead>
<tr>
<th>Species</th>
<th>Gestation (Days)</th>
<th>Effective date post-breeding (days)&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cow</td>
<td>275-305</td>
<td>60 - term</td>
</tr>
<tr>
<td>Sheep</td>
<td>144-152</td>
<td>70 - term</td>
</tr>
<tr>
<td>Goat</td>
<td>136-160</td>
<td>50 - term</td>
</tr>
<tr>
<td>Pig&lt;sup&gt;2&lt;/sup&gt;</td>
<td>101-130</td>
<td>30-35 &amp; 85-term</td>
</tr>
<tr>
<td>Deer (white-tail)</td>
<td>190-210</td>
<td>70 - term</td>
</tr>
<tr>
<td>Elk</td>
<td>240-262</td>
<td>80 - term</td>
</tr>
<tr>
<td>Alpaca, llama, camel&lt;sup&gt;3&lt;/sup&gt;</td>
<td>320-375</td>
<td>21.27 &amp; 300 - term</td>
</tr>
<tr>
<td>Rabbit</td>
<td>28-31</td>
<td>10 - term</td>
</tr>
</tbody>
</table>

<sup>1</sup>Easiest effective date can vary with individual, breed, age, parturition, and litter size.
<sup>2</sup>Camels can be tested at two intervals post-breeding: 21-27 days and 300 days to full term.
<sup>3</sup>Sheep can be tested at two intervals post-breeding: 30-35 days and 85 days to full term.

TEST PROCEDURE

When testing single samples, run P-TEST immediately after urine collection. When testing multiple samples, store urine in a sealed container and equilibrate to room temperature (72-80 degrees F) for a minimum of 20 minutes before testing.

A. Introduction of urine sample into the P-TEST vial
1. Using a 2.5 mL syringe fitted with a 16-18 G needle, slowly and gently transfer 1.5 mL of urine sample into the P-TEST vial. Avoid introducing air bubbles. (Hint: The sample should reach the 1.5 mL mark on the vial.)
2. Mix by gentle inversion 3 or 4X. The solution will immediately turn dark blue/purple. (Hint: Be sure the entire blue pellet is dissolved. Do not shake.)
3. Allow to stand at room temperature (72-80°F; 22-27°C). Do not disturb. (Hint: Be sure to run test at warm temperatures.)
4. Read results at 1 minute and 10 minutes according to the table below.
5. Record the results with animal ID #.
6. Dispose of used test vials in a responsible manner.

NOTE: To avoid cross-contamination, rinse syringe and needle with clean water between samples.

B. Results of P-TEST

<table>
<thead>
<tr>
<th>Color</th>
<th>Time (minutes)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMBER</td>
<td>1-10</td>
<td>NOT PREGNANT</td>
</tr>
<tr>
<td>LIGHT GREEN</td>
<td>10</td>
<td>Pregnant VERY EARLY TERM</td>
</tr>
<tr>
<td>GREEN</td>
<td>10</td>
<td>Pregnant EARLY TERM</td>
</tr>
<tr>
<td>BLUE-GREEN</td>
<td>10</td>
<td>Pregnant MID TERM</td>
</tr>
<tr>
<td>DARK BLUE</td>
<td>10</td>
<td>Pregnant LATE TERM</td>
</tr>
</tbody>
</table>

The following conditions can show false positives (dark blue) to this test:
- pro-estrus
- pre-pubertal females
- anestrus females
- retained placenta
- retained corpus lutei
- testing within 3 weeks after parturition
- testing of suckling calves
- fetal loss or fetal adhesion
- urinary tract infections

The following conditions can show false negatives (amber) to this test:
- cystic ovarian disease
- placentitis
- severe stress

CONFIRMING TEST RESULTS

To confirm a POSITIVE test result, repeat in 10 days. To confirm a NEGATIVE test, repeat in 10 days. If test is QUESTIONABLE, repeat as soon as possible with a fresh urine sample. (Note: Uncertain results are more common with early term pregnancies, maiden, and older females. Perform test only on reproducibly-sound females).

STORAGE CONDITIONS

Store product in a dark, cool, dry place (40°F; 5°C). Avoid moisture and strong sunlight. Reseal unused product in packet during storage.

HOW SUPPLIED

P-TEST is supplied in the following package sizes: 1, 10, and 50 tests

WARNINGS

KEEP OUT OF REACH OF CHILDREN.

Manufactured by EMLAB GENETICS, LLC Arcola, IL 61910 USA

Questions? Please call +1-708-442-3964 or log onto www.emlabgenetics.com

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