

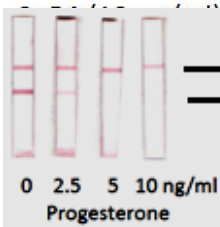
TruStrip™ RDT Bovine/Cow Progesterone (Ovulation) Rapid Test Cards

- Place the P4-reagents vials on a tube rack. Mark the vials and the test cards with the identification number. Add **50 ul of the assay buffer into the vial** to dissolve the reagent. **Dispense 50 ul (or two drops using dropper) of the P4 standards or the samples into the vial**. **The vial contains red dry reagents at the bottom and it must be completely dissolved by the samples (no red pellet at the bottom)**. Mix gently by tapping with a finger. It takes 20-30 seconds to dissolve the reagent pellet. Let the **tube stand for 5 minute** at room temp (25-28oC).
- Transfer the entire vial content (100 ul) into the test card's sample well (S)**. Avoid making bubbles. Observe the appearance of the control line at the top (C-end) and the test line at the bottom (T) **within 1-5 minutes**. Lines are reddish to brown in appearance.
- Record results by taking the picture and store the device in a plastic bag at room temp. Please see exemplary results on page 3.

Expected Results



- 1 2 3
- 1=invalid
2=No P4 (0 ng/ml)



Test dimensions are 1 cm x 6.5 cms. The picture on the left is about the **actual size of the cards**.

- No lines in the card rectangular window within 5 mins (card 1) makes the test invalid. Re-test or check expiration.
- In the absence of P4 (zero ng/ml) both the control line and the test lines are clearly visible and intense (card 2).
- Test lines at P4 conc. of 5 ng/ml or higher will be either very faint or not visible (card 3).
- The test has been optimized with 50 ul sample and the sensitivity of 5 ng/ml (90%-100%) disappearance of the test line.
- P4-test line will decrease in intensity with concentration (see below). P4 (2.5 ng/ml) will have 20-30% of 0 ng/ml intensity.

Sensitivity

The TruStrip Progesterone test should have almost no or faint test line at progesterone concentration of 5 ng/ml or higher.



Cat# 1856-RDT-10,10 tests

A lateral flow immunochromatographic test for the qualitative detection of progesterone in Bovine/Cow serum or plasma (Results in 10 mins)

For research use only (RUO), not for diagnosis, cure or prevention of the disease.



6203 Woodlake Center Drive • San Antonio • Texas 78244 • USA.
Phone (210) 561-9515 • Fax (210) 561-9544
Toll Free (800) 786-5777
Email: service@4adi.com
Web Site: www.4adi.com

Watch YouTube Video



<https://www.youtube.com/watch?v=xIG8dW9sFaw>

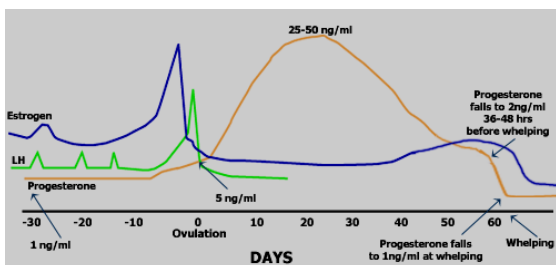
TruStrip Bovine Progesterone ovulation test-Contents

Components	qty
TruStrip Progesterone rapid test cards, 10, individually packed in sealed pouch plus dropper # 1856-TC	10 cards
Progesterone Assay vials 10 vials containing P4 reagents #P4-GC	10 vials
Progesterone Std. (0 ng/ml), 250 ul #P4-S1	1 vial
Progesterone Std. (5 ng/ml), 250 ul # P4-S2	1 vial
Progesterone assay buffer # P4-AB	2 ml
Complete Instruction Manual #1855-RDT-10	1

Intended Use

TruStrip Rapid Gold TM Bovine Progesterone Ovulation Test is a lateral immunochromatographic test card for the qualitative detection of progesterone hormone in Bovine serum or plasma. A surge in progesterone (5 ng/ml) is associated with ovulation. This test can help determine approximate time of ovulation in Bovine/cow. This kit is for research use only, not for diagnostic or therapeutic use.

INTRODUCTION



There are multiple hormones that help to regulate the estrus (heat) cycle and pregnancy in cows. These include:

Estrogen (E2): Stimulates the ovaries to produce eggs.

Luteinizing Hormone (LH): Stimulates the ovaries to release the

eggs.

Progesterone (P4): Maintains a pregnancy.

Understanding how the hormone levels change can help in determining the best time to breed and when to anticipate whelping. Most mammals ovulate when the estrogen level in the blood is increasing. Cows, however, ovulate when the estrogen level is declining and the progesterone level is increasing. Estrogen levels can give us a general idea of when a cow will come into heat, but are not sufficient to determine when breeding should actually take place. Vaginal cytology can also provide some general information. Progesterone levels and luteinizing hormone (LH) levels are the best indicators of when ovulation will take place and when is the best time to breed. They are also useful in determining whelping dates, allowing an owner to reserve the appropriate days on the calendar and even to schedule a c-section (caesarean) weeks in advance.

The progesterone test can be done every 2-3 days starting about 3-5 days into the heat. Timing of the test can be more certain if the lengths of the cow's previous heat cycles are known. The beginning progesterone levels are typically less than 1.0 ng/ml until the day before the LH surge. The day of the LH spike, serum progesterone concentrations are 2-3 ng/ml; the day following the LH surge, the serum progesterone

concentration is 3-4 ng/ml. Ovulation occurs at a progesterone level of 5 ng/ml.

Timing of breeding

The aim is to identify when the progesterone level reaches 2.5 ng/ml so the mating schedule can be set up, or the veterinarian and owner of the male cow can be notified that they should be prepared to collect and ship a semen sample.

PRINCIPLE OF THE TEST

Progesterone (P4) rapid test is a competitive immunoassay. Fixed amount of gold labeled Progesterone antibodies (conjugate) will bind to P4 in the sample and P4-coated on the membrane. The test line is visible as a reddish/brown line on the card. Higher the P4 in the sample, lower conjugate will bind to the membrane. Therefore, intensity of the test line is inversely proportional to the P4 concentration in the sample. Control lines contains antibodies that captures gold labeled antibodies. The control line must be obtained with or without test line to assure the integrity and functionality of the progesterone rapid test.

PRECAUTIONS

The ADI TruStrip Rapid Gold Progesterone rapid test is intended for *in vitro research* use only. For proper analysis of results, be sure to include positive and negative controls, blanks, and/or protein standards as appropriate. All test must be done as appropriate for the sample and disposed accordingly. Applicable MSDS, if not already on file, for the following reagents can be obtained from ADI or the web site for Proclin-300 (0.1% v/v in standards, and assay buffers). http://4adi.com/commerce/info/showpage.jsp?page_id=1060&category_id=2430&visit=10

STORAGE AND STABILITY

The test are stable at 2-8 °C for 1-year or until the expiration date printed on the label.

Items Required but not supplied with this kit

Precision pipettes (25-100 µl) for and dispensing of samples. 2 ml assay tube rack.

Samples

Collect serum or plasma (EDTA, heparin, citrated) and store at 2-4 °C for 1-2 days or store frozen. Do not use highly lipemic or grossly cloudy or turbid samples.

TruStrip Rapid Gold Progesterone ovulation test

1. Determine the number of test card required. You should run P4 standards (0 and 5 ng/ml) for proper functioning or when confirmation of results is needed. Remove the test device from foil pouch and place it on a flat and dry surface. Each pouch has a small dropper that should be used to transfer sample from the P4-reagents vials to the P4-card.
2. All samples must be brought to room temp (25-28°C).