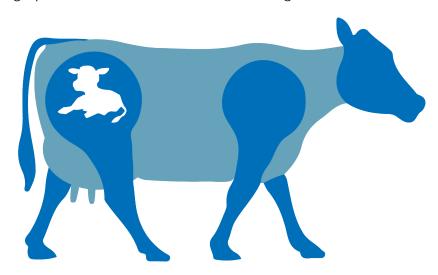
# Alertys Ruminant Pregnancy Test

The Alertys\* Ruminant Pregnancy Test is a proven tool for the accurate confirmation of pregnancy in cattle, sheep, goats, bison, and water buffalo, using serum or plasma samples.

Samples are sent to the laboratory, and results are received automatically.

The test enables laboratories, veterinarians, and producers to improve operational and reproductive efficiency by identifying open cows faster for earlier rebreeding.



# Open-cow detection throughout gestation

The Alertys Ruminant Pregnancy Test makes it easy to minimize the days open at any time through gestation and as soon as 28 days after breeding.

## Optimized profitability

Research shows that the average cost per open cow is \$4.30 a day. Losses for one cow open 20 days longer than expected, could be as high as \$86 for a single cow.<sup>1</sup>

## Improved reproductive performance

Early identification of open cows allows for early rebreeding, which assists in improving reproductive performance.

## Less animal handling and stress

You can expand your testing options by running other diagnostic tests, such as tests for Johne's disease and bovine viral diarrhea virus (BVDV), on the same serum or plasma samples.

### Test characteristics

The Alertys Ruminant Pregnancy Test is a laboratory-based enzyme-linked immunosorbent assay (ELISA) in a 96-well plate format. It is validated for use on cow, goat, sheep, bison, and water buffalo serum or plasma samples.

- Part number: 99-41169
- Assay time: less than 2.5 hours
- High level of accuracy from 28 days postbreeding and from 60 days postcalving

The Alertys pregnancy tests provide producers with consistent and accurate results on par with alternative methods of pregnancy diagnosis. For sensitivity and specificity on individual species samples, refer to the Alertys Ruminant Pregnancy Test Validation Data Report.<sup>2</sup>

## **IDEXX Ruminant Pregnancy Test**

FAQs

### General test information

## 1. What does the Alertys Ruminant Pregnancy Test detect?

The test detects pregnancy-specific proteins called pregnancy-associated glycoproteins (PAGs). These specific proteins are expressed in the embryonic regions of the placenta and are detected in maternal fluids such as blood and milk.

## 2. What types of samples can be run using the Alertys Ruminant Pregnancy Test?

The Alertys Ruminant Pregnancy Test has been developed to perform robustly on serum or EDTA plasma of cattle, sheep, and goats and on EDTA plasma only for water buffalo and bison.

## 3. Can the quality of the sample affect the test results?

Serum samples with trace hemolysis (light-red color) and moderate lipemia (milky appearance) may have little or no effect on ELISA results. Avoid using samples that are heavily hemolyzed (dark-red color) or grossly lipemic. When serum is on the clot, be careful not to aspirate any of the clotted material or blood cells.

## 4. What is the difference between PAGs and progesterone?

Progesterone is a hormone that occurs with peaks and valleys during the normal reproductive cycle and is not pregnancy specific. The Alertys Ruminant Pregnancy Test detects pregnancy-specific proteins called pregnancy-associated glycoproteins (PAGs). These specific proteins are expressed in the embryonic regions of the placenta and detected in maternal fluids such as blood and milk.

## 5. Does the Alertys Ruminant Pregnancy Test still detect PAGs after early embryonic death or after abortion?

Yes, PAGs will circulate in blood for a certain period of time after embryonic loss or abortion. For early embryonic loss, we estimate PAGs will disappear within 6–10 days. In case of late-term abortion, PAGs may be present for a longer period of time (40–60 days). It should be noted that it can take up to 60 days for PAGs to drop below the test threshold postcalving.

## 6. Can the test tell me the stage of gestation, the sex of the calf, or whether the cow is carrying multiple calves?

No, the test will provide a pregnant, nonpregnant, or recheck result. It cannot indicate the stage of gestation, the sex of the calf, or whether the cow is carrying multiple calves.

## 7. What is the influence of breed on the test?

No breed influence on test performance has been described.

## Costs and test timing

#### 1. What does the Alertys Ruminant Pregnancy Test cost?

Each laboratory will set its own price for the testing service. IDEXX recommends a retail price in line with alternative pregnancy detection methods, such as ultrasound or palpation. Ask your local laboratory for details.

#### What is the return on investment from using this test? 2.

The Alertys\* Ruminant Pregnancy Test delivers reliable blood-based results that support early, confident decisions. Shorten calving intervals with safe, ongoing confirmation of pregnancy status at critical stages. Save an estimated \$77 per head by identifying and removing subfertile cows early.<sup>3</sup>

### 3. How/where do I get the test?

Visit idexx.com/mylab for information on test ordering.

#### Why test more than once per gestation? 4.

During the normal gestation process, approximately 10%-25% of pregnancies will be lost between conception and full-term because of unknown causes. Pregnancy testing at specific times throughout gestation helps improve reproductive efficiency by finding cows who have experienced pregnancy loss.

### What are the different test intervals, and why are they important? 5.

- Pregnancy check 1 (P1): 28–35 days of gestation, after artificial insemination (AI); the first opportunity to find nonpregnant (open) cows. Estrous synchronization programs allow these cows to be rebred more quickly.
- Pregnancy check 2 (P2): 35–70 days of gestation; peak period of early embryonic death (EED). Best-practice management programs confirm pregnancy status and identify EED.
- Pregnancy check 3 (P3): 90-110 days of gestation; EED peak is now past. The cow is approaching the break-even phase of the lactation curve. Testing can help you make breeding/culling decisions.
- Pregnancy check 4 (P4): 200-230 days of gestation (dry-off). Although uncommon, pregnancy loss can occur between 100-230 days of gestation. This is an important decision point for dry-off and culling.

### I have a bull in my herd or use a bull at the end of my artificial insemination period. How does the 6. test work in this situation?

You can use the test, but you must apply rules around testing. For example, test 50 days after the cow is put with the bull (21 days for heat, plus 28 days to the earliest test), or test 28 days after the bull leaves the herd. If the bull is running with the herd all the time, you may need to test monthly, but remember: the test will not tell you how far along the cow's pregnancy is. A negative result does not mean not-pregnant if the test is done less than 28 days after service.

### References

- De Vries et al, Economics of improved reproductive performance in dairy cattle (Publication AN 156), Gainesville FL, University of Florida Institute of Food and Agriculture Science; 2005.
- Report on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.
- Cook B, Biermacker JT, Childs D. The value of pregnancy testing beef cows. Paper presented at: 2007 Southern Agricultural Economics Association Annual Meeting; February 4–7, 2007; Mobile, Alabama.

Test with Confidence

