

# DG29™

## Bovine Blood Pregnancy Test

### Questions & Answers

#### **What is DG29?**

DG29 is an easy-to-use bovine blood pregnancy test. Blood samples are drawn from cattle on the farm or ranch, forwarded to a certified laboratory and pregnancy diagnosis results are returned to the farm quickly and accurately.

#### **How Does the DG29 Test Work?**

The DG29 bovine pregnancy test uses ELISA (enzyme-linked immunosorbent assay) technology to detect a specific pregnancy-related protein within the serum extracted from the blood sample. Based on the presence or lack of presence of the pregnancy-related protein positive (pregnant) or negative (open) results are reported.

#### **When Can an Animal Be Tested?**

The DG29 test can be conducted on cows or heifers as early as 29 days post breeding. Cows must also be at least 90 days post calving before blood samples are collected. Performing the DG29 test on cows less than 90 days post calving may result in false positive test results; in these animals, the pregnancy-related protein from the previous pregnancy may still be present.

#### **Can DG29 Be Used to Test Embryo Transfer Recipients?**

Yes, DG29 can be used to test the pregnancy status of embryo recipients. For recipients, blood samples must be drawn on or after day 32 of the pregnancy and therefore 25 days after implantation (embryo is at day 7 when implanted + 25 days = day 32).

A minimum of 32 days is required for embryo recipients as embryos are not all at the same level at the time of their transfer. Many variable factors affect the quality of transferred embryos: number of days of embryonic development (5 to 7 days); embryo quality (A, B or C); implantation of fresh versus frozen embryos; sexed or not sexed embryos; and split embryos or embryos left whole.

#### **How Accurate Are the DG29 Test Results?**

Research published in the Canadian Veterinary Journal has proven the DG29 test to be over 98.7 percent accurate. For the most accurate results, dairy and beef producers must follow the blood collection timeline indicated above. In addition, false results may be generated if embryo mortality occurred prior to or at the time the blood sample was collected.

#### **What Are the Advantages of DG29?**

DG29 is a convenient, cost-efficient option for pregnancy testing between veterinary visits. Quick turnaround time allows animals to be re-entered into an artificial insemination or synchronization program sooner, which decreases days open and increases profits.

DG29 can be performed at 29 days post breeding or up to six days earlier than palpation. Test results can be received on the farm before palpation can even be performed.

## How Are Samples Collected?

Blood samples should be drawn from the vein located under the animal's tail. Fill the red-topped blood tube (included with the purchase of the DG29 test) until the blood stops flowing. At least 2cc of blood are needed to complete the test. Each tube must be labeled with the tube number and animal identification to ensure accurate results. In addition, a DG29 test submission form must be included with all blood samples sent to the laboratory. Detailed instructions on how to collect the samples are included in each DG29 test kit.

*Note: It is important to use a new needle for each blood sample to avoid cross contamination.*

## How are Results Reported?

Each animal is reported with a positive (pregnant) or negative (open) test result. If the level of pregnancy-related protein for any given animal is abnormal for the days post breeding reported, comments are included with the results. All results are returned by email, fax or mail per member/customer request.



## What is Included in the Price of the Test?

There are two purchasing options. The first option is to purchase a complete kit. The complete kit includes the required red-topped blood tubes, disposable needles, a needle holder and hazardous material shipping containers. The shipping of the kit to the farm or ranch and the price of the test analysis are also included in the cost of the complete kit. The complete kit is available in quantities of 6, 24, 48, 72 or 144 blood tubes/DG29 tests. (Postage not included on the six pack kit).

The second option is to purchase only the red-topped blood tubes and test analysis. This option is packaged in quantities of 48, 72, 144 or 288 blood tubes/DG29 tests, and does not include the cost of shipping the blood tubes to the farm or ranch. Individual needles, the needle holder and hazardous material shipping containers may be purchased separately.

All DG29 samples sent to the lab *must* be submitted in the CRI provided red-topped blood tubes. This ensures quick and accurate results. With both purchasing options, the member or customer must pay the shipping charges for transporting the blood samples from the farm to the laboratory.

## Can DG29 Blood Samples Be Sent Via the United States Postal Service?

DG29 blood samples can easily be shipped to the laboratory via the United States Postal Service (USPS). Place the provided red-topped blood tube(s) into the plastic hazardous material shipping container(s) supplied with the test kit. Place the protective container(s) into a cardboard box and seal. Write "Exempt Animal Specimen" on the outside of the box along with the address to the laboratory. Samples may also be sent to the laboratory by UPS or FedEx. Refrigeration of the blood sample is not necessary. Samples may be in transit for up to a week without compromising the test results. Mailing procedures are included in DG29 complete test kits.

## Where Can DG29 Test Kits Be Purchased?

DG29 test kits can be purchased by contacting your local AgSource or Genex representatives. Test kits can also be purchased by contacting AgSource at 800-236-4995, calling Genex customer service at 888-333-1783, or ordering online through the Genex Profit Shop at [profitshop.crinet.com](http://profitshop.crinet.com).