

[Home](#) [Services](#) [Mission](#) [News](#) [Contact Us](#)



Bovine Pregnancy ELISA

General condition information: The Bovine Pregnancy ELISA is designed to detect a subset of pregnancy-associated proteins (PAGs) in milk, serum or EDTA plasma samples from cattle. Secretion of PAGs from the placenta begins at the time of implantation and circulatory concentrations generally increase throughout pregnancy, peaking just before parturition. Prompt detection of non-pregnant cows is critical to reducing days open and interval between services. The PAGs detected by the Bovine Pregnancy ELISA have a shorter half-life than other commercially available tests, allowing accurate determination of reproductive status. In milk samples, the assay can be used as early as 35 days post-breeding and 60 days-in-milk; while in serum and plasma samples the test can be used as early as 28 days post-breeding and 60 days-in-milk.

Results presentation (Value): The Bovine Pregnancy ELISA quantifies the level of PAGs in milk, serum or EDTA plasma. Results are presented in absorbance units (ELISA Score), which is directly correlated with the amount of PAG present in the sample.

Results interpretation (Final Result):

Milk Samples: In the current test, a sample with a value less than 0.10 units is considered 'OPEN', while a score of 0.25 or greater suggests the presence of a developing placenta, which is consistent with an active pregnancy. Therefore animals with a score of 0.25 units or greater are identified as 'PREGNANT'. Samples with ELISA scores between 0.1 and 0.25 are interpreted as 'RECHECK', indicating either not enough PAG to confirm "PREGNANT" or too much PAG to confidently call the cow "OPEN". These cows should be confirmed at a later date, either on the next vet check day or next DHI test day. Recheck results should comprise less than 4% of samples tested.

Serum or Plasma Samples: In the current test, a sample with a value of less than 0.30 units is considered 'OPEN', while scores of 0.30 or greater suggests the presence of a developing placenta which is consistent with an active pregnancy. Therefore animals with a score of 0.30 or greater are identified as 'PREGNANT'.

Test performance:

Milk: Sensitivity = 98.8%; Specificity = 97.7%

Serum: Sensitivity = 99.3%; Specificity = 93.8%

Plasma: Sensitivity = 99.1%; Specificity = 95.1%

Links to additional information:

[Bovine Milk Pregnancy ELISA](#)

[Bovine Serum Pregnancy ELISA](#)

This diagnostic assay, as with any biological test, may occasionally produce false positive or false negative results. Interpretation of positive and negative results should consider clinical, historical and epidemiological information relevant to the animal(s) under test. Therefore, animal husbandry decisions rest solely on the herd owner, and any consulting veterinarian or animal health advisors. Antel BioSystems, Inc. & NorthStar Cooperative, Inc. accept no responsibility for any loss or damage, howsoever caused, arising from the interpretation of results. Test results pertain only to those animals tested.

[Home](#) [Services](#) [Mission](#) [News](#) [Contact Us](#)