# Vcheck eProgesterone

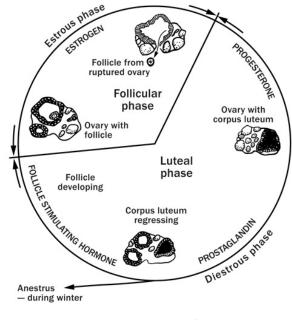
Quantitative marker of Equine progesterone





# What is Progesterone?

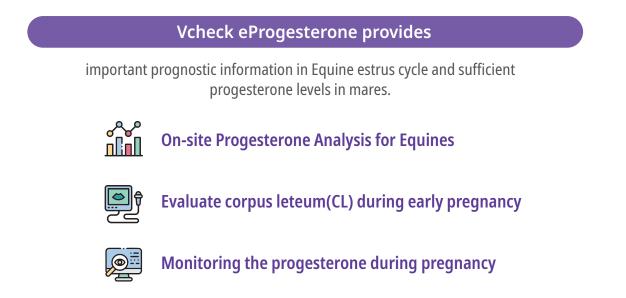
Progesterone is initially produced by the primary corpus luteum. It begins to increase after ovulation in diestrus, irrespective of pregnancy status, with the development of the corpus luteum <sup>1</sup>.



The estrous cycle<sup>2</sup>

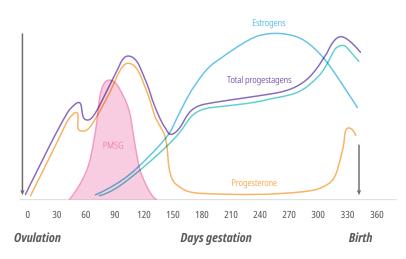
## What does a Progesterone level tells us?

Progesterone plays a crucial role in the maintenance of pregnancy until 120 days of gestation when the placenta becomes the main source <sup>2,3</sup>. In addition, measuring progesterone helps find out mare's reproductive cycle and plan most effectively.



# **Clinical Application**

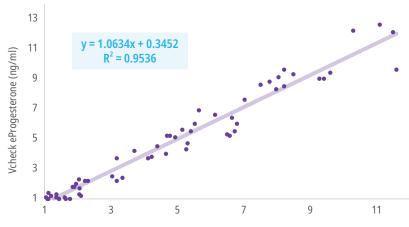
A progesterone concentration of 2 ng/mL is considered the minimum endogenous amount necessary to support pregnancy. Generally, progesterone concentration below 2 ng/ml in the blood is associated with embryonic loss, whereas a concentration above 4 ng/ml is considered to be adequate to maintain pregnancy <sup>2,4</sup>.



Hormone levels and corresponding ovarian activity in mares <sup>5,6</sup>

# Performance

Vcheck eProgesterone has a strong correlation ( $R^2$ =0.9536, y=1.0634x - 0.3452) with the reference method (Immulite 2000), which has been used in reference laboratories.



#### Correlation with Immulite 2000 of Siemens (n=61)

Immulite 2000 progesterone (ng/ml)

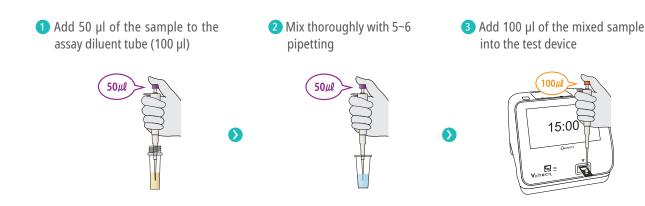
# Vcheck eProgesterone

## Specifications

- Species : Horse
- Sample : Serum, Plasma (heparin) 50 µl
- Testing time : 15 minutes
- Measurement Range : 1 ~ 30 ng/ml
- Storage Condition : 2~8 °C



### **Test Procedure**



## **Reference Ranges**

≤ 2 ng/ml	> 2 ng/ml	
Low	High (gestation)	

## **Ordering Information**

Product No.	Product Name	Storage Condition	Packing Unit
VCF142DC	Vcheck eProgesterone	2 - 8 °C	5 Tests/Kit

Reference: 1. Kelleman AA, Act D. Equine pregnancy and clinical applied physiology. In: Proceedings of the 59th Annual Convention of the American Association of Equine Practitioners (AAEP); 7-11 December, 2013. Nashville, Tennessee, USA. pp. 350-358 2. Anatomy, physiology and reproduction in the mare. 2010, https://www.ontario.ca/page/anatomy-physiologyand-reproduction-mare 3. Grabowska A, Kozdrowski R. Relationship between estrus endometrial edema and progesterone production in pregnant mares two weeks after ovulation. BMC Veterinary Research. 2022 Nov;18(1):414. 4. Allen W. Luteal Deficiency and Embryo Mortality in the Mare. Reproduction in Domestic Animals 2001;36. https://doi.org/10.1046/ J:1439-0531.2001.00312.x. 5. Shideler RK, Squires EL, Voss JL, et al. Progestogen therapy of ovariectomized pregnant mares. J Reprod Fertil Suppl 1982;32:459-464.

