EQUINE

Vcheck IgG

Evaluate IgG Levels of Neonatal Foals

Neonatal foals are born without antibodies and are unable to produce their own immunoglobulin G (IgG) initially which makes them vulnerable to various diseases. If a foal fails to consume an adequate amount of high-quality colostrum within 24 hours, its IgG levels will be low, increasing the risk of severe infections. The Vcheck Foal IgG in vitro diagnostic test kit provides quantitative measurement of IgG levels in serum and plasma.

Clinical Applications

- Assess the immune level of a neonatal foal
- Evaluate the quality of the mare's colostrum after foaling
- Monitor the immune level serially

Specific Clinical Application

Early testing for IgG concentration in newborn foals can identify potential cases of FPT. IgG concentrations should be tested 12 hours after birth to assess passive transfer status. If the foal has partial or complete FPT, you must administer antibodies via fresh or frozen oral colostrum (within the first 12-18 hours of life), commercial products, or intravenous plasma (if 24 hours have passed).

Algorithm to prevent Failure of Passive Transfer

Vaccinate the mare 4-6 weeks before foaling[1]

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Make sure the foal stands and nurses
Watch for common causes, such as early lactation, placental infections, premature birth, fescue toxicosis, and poor-quality colostrum

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Run an IgG test ideally after 12 hours of birth

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IgG < 400 mg/dL	IgG 400 - 800 mg/dL	IgG > 800 mg/dL
↓	↓	↓
Complete FPT (failure of passive transfer)	**Partial FPT** (failure of passive transfer)	**Successful passive transfer in foal**

↓

Administer antibodies
- (Within the first 12-18 hours of life) via fresh or frozen oral colostrum, commercial products
- (If 24 hours have passed) intravenous plasma

→ **After treatment, IgG concentrations should be rechecked in 8 to 12 hours.**
To assess the adequacy of immunoglobulin therapy

Reference: 1) Vaccination and Passive Transfer, Reviewed by the AAEP Infectious Disease Committee in 2021 2) https://thehorse.com/197216/what is failure of passive transfer in horses/ 3) Sally Vivrette , DVM, PhD, Colostrum and Oral Immunoglobulin Therapy in Newborn Foals

BIONOTE

A Closer Look: Foal IgG

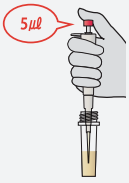
The measurement of equine IgG concentration serves as a sensitive marker for determining the adequacy of passive immunity transfer. A foal with a low IgG concentration is considered to have experienced a failure of passive transfer (FPT), leaving it susceptible to infectious diseases and mortality. Therefore, assessing the equine IgG concentration is a valuable diagnostic tool for determining the presence of sufficient IgG levels.

< 400 mg/dL	400 ~ 800 mg/dL	> 800 mg/dL
Failure of passive transfer in foal	Partial failure of passive transfer in foal	Successful passive transfer in foal

Specifications

Species	Equine
Sample Type	Serum, Plasma (EDTA or heparin) 5 µl
Measurement	Quantitative
Range	100 ~ 1,000 mg/dL
Testing Time	5 minutes
Storage Condition	2 - 30° C

Simple Testing Procedure



Dilute Sample

Use a 5 µl pipette to draw 5 µl of serum or plasma (heparinized) and add into an assay diluent bottle.

Mix

Close the bottle cap and shake 5 - 6 times to mix thoroughly.

Measure

Add 100 µl of the mixed sample to the sample well of the test device and press [START].

Product Name	Product Number	Product Type	Packing Unit
Vcheck Foal IgG	VCF143DC	Device	5 Tests/Kit

Vcheck from BIONOTE

For More Information on
Vcheck V200 or V2400
analyzers visit:
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LEARN MORE
about the Foal IgG Test

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