SAA VET test kit

For veterinary use only!

Veterinary test kit for quantitative in vitro determination of SAA in serum on a Micro-Cube analyser



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Order information Order number: C50170 Order number: C51700 Indication SAA VET test kit SAA VET control kit Kit size 6 tests 1 x 2 ml (decision level)

Test kit preparation: Allow single test at least 10 minutes to warm up to room temperature (20 - 25 °C) by placing the test into the test kit rack. Put test kit package back into refrigerator.

Summary

Serum amyloid A (SAA) is an early and sensitive blood biomarker for tissue injury and inflammation and has been indicated in many inflammatory diseases. The level of SAA circulating in blood is known to increase dramatically in response to tissue damage or inflammation, classifying it as an acute-phase protein. Circulating SAA concentrations may increase up to 1000-fold following inflammation, infection, tissue injury and cell necrosis and decline rapidly following recovery.

It has also been observed in several veterinary species, including horses, that SAA is a very useful inflammatory marker that may be used for detection of clinical and possibly subclinical disease, monitoring of disease activity and response to therapy, prognostication and detection of spreading of infections in herds (Nielsen et al., 2004). The kinetic profile of the SAA response makes SAA an excellent indicator of inflammation. Hepatic SAA synthesis begins shortly after an inflammatory insult. As a result plasma concentrations start to increase within a few hours and peak 36 – 48 hours after injury, as demonstrated previously in horses after experimental induction of inflammatory or infectious disease (Hulte'n et al., 2002).

Method

Photometric endpoint measurement at 546 nm wavelength. Latex agglutination test based on optical measurement of the change in turbidity caused by the agglutination of the latex particles sensitised with SAA antibodies.

Measurement Range

Horse: 10 - 500 μg/ml (10 - 500 mg/l) (Lot dependent) Cat: 10 - 150 μg/ml (10 - 150 mg/l) (Lot dependent)

Samples with concentrations higher than the upper limit of the measurement range must be diluted 1 + 5 with physiological saline (0.9% NaCl), e.g. 20 μ l sample + 100 μ l 0.9% NaCl solution, and the result then multiplied by 6.

Sample Material

Use 5 µl serum.

Test Kit

R1 cuvette filled with Good's buffer.

R2 cap filled with anti-human SAA rabbit polyclonal antibodies and anti-human SAA mouse monoclonal antibodies.

Stability and Storage

Stable until the expiration date stated on the label when stored in unopened vacuum package at 2 - 8 °C. Opening the vacuum package may limit the reagent stability to three months (stored at 2 - 8 °C) from the date of opening. DO NOT FREEZE!

Warnings and Precautions

DO NOT INGEST! Avoid contact with skin and eyes. Contains sodium azide, which may react with lead or copper plumbing to form explosive compounds. Observe all necessary precautions for the use of laboratory reagents.

Waste Management

Please refer to local legal requirements.

Reference Range

Cat:	< 10 µg/ml
Horse:	< 20 µg/ml
Camel:	< 10 µg/ml

It is recommended that each laboratory establishes its own reference ranges.

Quality Control

For internal quality control the MVD SAA VET control kit is recommended. Order number: C51700

Precision

Reproducibility within-run: Control; N = 20; mean = 99 µg/ml; CV = 8%

Correlation

Horse sample correlation: y (MVD SAA) = 0.91 x (Integra Eiken SAA) + 17.374; R² = 0.99

Interferences

No interferences known to occur.

References

 HANSEN, A.E., SCHAAP, M.K., KJELGAARD-HAN-SEN M. (2005) Evaluation of a commercially available human serum amyloid A (SAA) assay for determination of feline SAA concentration. Vet. Res, Comm. (Suppl. 2) : 1 - 10



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Processing of an SAA VET test

1.



2.



2.1



ATTENTION!

Allow single test at least 10 minutes to warm up to room temperature (20 - 25 °C) before use!

1. Preparation of test system

- 1.1 Place RFID card
- 1.2 Place R1 cuvette in test kit rack
- 1.3 Place R2 cap in test kit rack
- 1.4 Press "Measurement" button, enter required information using the touchscreen

2. Sample preparation

2.1 Aspirate 5 µl sample material from centrifuged sample tube

3. Sample processing

- 3.1 Dispense sample INTO THE LIQUID in the R1 cuvette
- 3.2 Apply R2 cap firmly onto R1 cuvette
- 3.3 Place assembled cartridge into laboratory photometer
- 3.4 Start automatic sample processing by closing the door of the Micro-Cube laboratory photometer.