INTENDED USE
For measurement of Serum Amyloid A (SAA) in animal serum or plasma.

INTRODUCTION
Serum amyloid A (AA) is an apolipoprotein associated in HDL. It has 11.4 kDa molecular weight and its amino acid sequence has high homology between animals. SAA has been considered one of the most sensitive acute-phase protein as CRP. Serum SAA level rises dramatically by bacterial infection, viral infection, stress, trauma, inflammation, surgery, tumors, autoimmune diseases and tissue necrosis. Also, the level of SAA is considered to reflect healing of the inflammation. The increase occurs within 12hrs after induction and the level may increase 1000 times of normal level.

This measurement utilizes a latex agglutination reaction, and the change in turbidity caused by the reaction measured optically to determine SAA concentration.

PRINCIPLE OF THE METHOD
This method is an immunoturbidimetric method by using the latex agglutination reaction and automated analyzer.

The latex reagent is prepared by binding anti SAA antibodies to the surface of the latex particles. When this reagent is mixed in a reaction cell with the sample, SAA antibodies which are bounded to the latex particles react with SAA in the sample, and cause agglutination. This reaction is measured as a change in the turbidity, with the amount of the amount increasing in proportion to SAA concentration in the sample. Measurement using VET-SAA applies this principle to find a calibration curve from calibrators of known concentration. The amount of SAA in the sample is then found relative to this calibrator.

CONTENTS OF THE KIT
1. Reagent-1 20mL, 2 vial (Contains 50mMol, of Good’s Buffer)
2. Reagent-2 20mL, 2 vial (Contains latex sensitized with anti SAA monoclonal antibodies)

WARNINGS AND PRECAUTIONS
1. For veterinary research use only.
2. Use the fresh animal serum or plasma. When samples are stored, they should be kept at -20°C. Repeated freezing and thawing of sample should be avoided.
3. Be sure to store the reagents under the designated conditions (2-10°C). Do not use reagents that have passed their expiration date.
4. Mix the latex reagent before using by gently inverting the vial several times.
5. Measurement errors may result if bubbles are present on the surface of sample after it is dispensed into the sample cup. Therefore remove all bubbles. If fibrin is present on the sample cup, remove it. Fibrin can cause clogging of the sample nozzle.
6. Create a calibration curve for each day of measurement. Also be sure to create a new calibration curve when a reagent from a different vial or lot is used.
7. The test sample may be contaminated with pathogens. Therefore, use caution when handling.
8. If the sample antigen concentration exceeds the measurement range, dilute with a normal saline solution or similar solution and perform measurement again.
9. Use the reagents as quickly as possible after they are opened. If they are to be stored, be sure to close the caps and store them using the prescribed method.
10. There is the danger of infection from all tools, reagents, and reagent containers that contact the sample. Disinfect the autosampler using an autoclave or other means, or soak them in hypochlorous acid or other disinfectant solution.

INTERFERING SUBSTANCES
Mostly no effect on the measurement value was found from conjugated bilirubin (20mg/dL), free bilirubin (20mg/dL), hemoglobin (500mg/dL), chyle (2,000 formazine turbidity units), and rheumatoid factor (RF) positive sample 500I/e/mL. As an anticoagulant almost no effect on the measurement value was found from EDTA + 2% sodium citrate (500mg/dL), sodium citrate (1,000mg/dL) and heparin sodium (40mg/dL).

INTERNAL QUALITY CONTROL
A quality control program to monitor the performance of VET-SAA is recommended to each laboratory. The following relevant products are being recommended for the quality control program.

VET-SAA-CC-Low (REF V-S291)
VET-SAA-CC-High (REF V-S292)

PRODUCT CODE, PRODUCT NAME & STORAGE

REFERENCE